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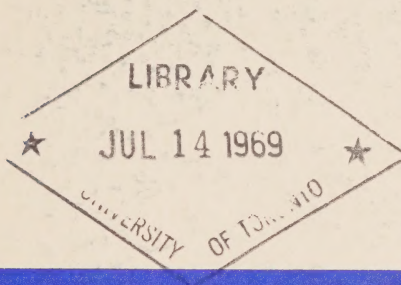
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Water management in Ontario

Government
Publications

Ontario
Water Resources
Commission

Water Resources
Bulletin 1-1
General series



DATA FOR
NORTHERN ONTARIO
WATER RESOURCES
STUDIES
1966 to 1968



WATER RESOURCES
BULLETIN 1-1
General series


**DATA FOR
NORTHERN ONTARIO
WATER RESOURCES
STUDIES
1966 to 1968**

ONTARIO WATER RESOURCES COMMISSION
DIVISION OF WATER RESOURCES

TORONTO

ONTARIO

1969



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Data for Northern Ontario
Water Resources Studies

Water Resources Bulletin 1-1

ERRATA SHEET

<u>Page</u>	<u>Particulars</u>	<u>Correction Needed</u>
12	Table 1, Drainage Area	3, 670 sq. miles excluding the Lake St. Joseph Diversion area of 4, 720 sq. miles The total area of 8, 390 sq. miles produced the records shown below
Map 2006-3	1	Read "Cheepay River" instead of Chipie River 51°27'N, 83°26'W
	2	Stream gauging stations not abandoned as shown: (a) 43-01-006 Balkham Creek 50°11'N, 86°43'W (b) 43-01-007 Balkham Creek 50°11'N, 86°43'W (c) 43-01-009 Cheepay River 51°27'N, 83°26'W (d) 43-01-018 Muswabik River 51°32'N, 85°05'W
	3	Stream gauging stations abandoned: (a) 43-01-010 Keezhik and Troutfly Creek at outlet of Curry Bay 51°36'N, 83°36'W (b) 4JC-1 Nagagami River 49°46'N, 84°32'W
	4	Stream gauging station not lake gauge as shown: 4JD-5 Pagwachuan River 49°45'N, 85°19'W
	5	The east boundary of the Lake St. Joseph Diversion is in error. The north-east junction should commence at 51°20'N, 90°20'W and proceed southerly through Rat Rapids and west of Savant Lake to its south boundary at 50°30'N, 90°40'W.

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Water Resources Bulletin 1-1

Data for

Northern Ontario Water Resources Studies

1966 to 1968

INTRODUCTION

In October, 1965, the Prime Minister of Canada and the Premier of Ontario announced that the Governments of Canada and Ontario had agreed to undertake a series of co-ordinated studies of Ontario's northern water resources and related economic development. Provision was made for the establishment of a Co-ordinating Committee representing the two governments to arrange for the exchange of all information gathered in the studies and to avoid duplication or overlapping of effort by the participating agencies. Most of the work is being undertaken in five large river basins draining to Hudson Bay and James Bay. From northwest to southeast these are the Severn, Winisk, Attawapiskat, Albany and Moose River basins.

The Co-ordinating Committee prepared a statement of objective for the studies to be carried out separately by agencies of the two governments, as follows:

"With respect to waters draining into James Bay and Hudson Bay in Ontario, to assess the quantity and quality of water resources for all purposes; to determine present and future requirements for such waters; and to assess alternative possibilities for the utilization of such waters locally or elsewhere through diversions."

The Government of Ontario delegated its part in the hydrologic and engineering aspects of the studies to the Ontario Water Resources Commission. The OWRC Division of Water Resources assigned the Hydrologic Data Branch and the Surveys and Projects Branch to pursue the studies. Ontario's part in the economic aspects of the studies was delegated to the Applied Economics Branch of the Ontario Department of Economics and Development and upon reorganization of some Ontario government departments, to the Economic Planning Branch of the Department of Treasury.

SCOPE OF BULLETIN

This bulletin is limited to the presentation of data gathered by the Ontario Water Resources Commission during 1966, 1967 and 1968. Tables and maps are used to present the data and information on streamflows, rainfall values, lake soundings, snow course data, water quality analyses and hydrogeology. A more complete report will be published at the end of the study and will deal in detail with the interpretation of the data obtained and the significance of the various hydrologic factors to the water resources of northern Ontario.

METHOD OF SURVEY

The activities of the two branches of the Division of Water Resources working in the Northern Ontario Water Resources Studies are described below.

The Hydrologic Data Branch is engaged in the development of hydrometric networks and the gathering of hydrologic data throughout the Ontario portion of the Hudson Bay-James Bay drainage system. The field work of this branch is concentrated upon the measurement of streamflow, rainfall, snowfall, ground-water levels and water quality. Field investigations are carried out to select sites for the installation of observation wells and streamflow gauging stations. The Branch also provides background information for work of the Surveys and Projects Branch and continues the collection of data at points designated by the Surveys and Projects Branch.

The Surveys and Projects Branch works in one basin each year and evaluates the hydrologic regime and water quality of the northern river basins. Stream gauging sites are investigated for suitability as stations that will provide runoff data for representative drainage basins. The hydrogeologic conditions in the basins are investigated to determine ground-water availability and quality and to assess their effects on runoff regimes. Water quality tests are made continually. The Surveys and Projects Branch designates points at which data should continue to be collected to support its study of water availability.

The Hydrologic Data Branch began field work in the summer of 1966. The Surveys and Projects Branch commenced its field activities with a party of its own in the summer of 1967. Since that time both Branches have maintained separate parties.

The parties operate the majority of the time out of Nakina, Ontario. Chartered aircraft operating from Nakina are used to fly out to the remote areas which could not be reached otherwise. The geologists and scientists of both branches make extensive use of canoes when gathering geologic information.

The areas in which the parties worked are as follows:

1966: Hydrologic Data Branch worked in the five major basins -- Severn, Winisk, Attawapiskat, Albany and Moose River basins -- and in the Ekwana River basin.

Work in the Attawapiskat River basin was carried out for the Surveys and Projects Branch by the consulting engineering firm of Gibb, Underwood, and McClellan.

1967: Hydrologic Data Branch worked in the Severn, Winisk, Attawapiskat and Albany River basins with greater attention in the Severn and Winisk basins on geologic mapping. Surveys and Projects Branch worked in the Upper Albany River basin.

1968: Hydrologic Data Branch worked in the Severn, Winisk and Albany River basins with greater attention in the Winisk basin on geologic mapping.

Surveys and Projects Branch worked in the Lower Albany River basin.

FIELD PERSONNEL

OWRC personnel engaged in the Northern Ontario Water

Resources Studies field activities during these years are listed below.

<u>Year</u>	<u>Hydrologic Data Branch</u>	<u>Surveys and Projects Branch</u>
1966	J. Silburn - Engineer - Party Chief P. Duckworth - Scientist G. Kendrick - Geologist T. Spence - summer student R. Wilkins - summer student	
1967	J. Silburn - Engineer - Party Chief G. Hamilton - Geologist P. Ackermann - Technician J. Armstrong - summer student N. Dorff - summer student	R. Pikula - Engineer-Party Chief P. Duckworth - Scientist R. Wilkins - Scientist R. Thomson - summer student M. Van Sickle - summer student
1968	J. Silburn - Engineer - Party Chief G. Hamilton - Geologist P. Ackermann - Technician W. Craig - summer student D. Hunter - summer student L. Whitney - summer student	R. Pikula - Engineer-Party Chief K. T. Wang - Geologist R. Wilkins - Scientist J. Vilaro - Technician A. Roy - summer student G. McBride - summer casual M. Monias - guide

EXPLANATION OF DATA PRESENTATION

All data in the tables that follow have been grouped according to the major drainage basins. The following comments explain some of the terms used and methods adopted in the descriptions appearing in the tables.

Locations

Locations are given by latitude and longitude and were determined from scaling the plotted locations on maps. The descriptions are further elaborated by references to stream features such as confluences or lake outlets or nearest settlements.

Drainage Areas

The drainage area of a given streamflow station or measuring point is that area which is enclosed by a topographic divide such that all precipitation that falls on the area will drain past the measuring point or station. Areas were determined from the maps of the National Topographic System at a scale of 1:250,000.

Gauges

Where appropriate, types of gauges and brief descriptions of gathering devices are given.

Discharges

Discharges were computed by use of current meters and were measured either by wading or by suspension from a boat. In both cases, the stream was divided into approximately 20 sections so that the discharge in each section did not exceed ten per cent of the total discharge. The velocity was measured in each section and the discharge calculated. The summation of discharges for all sections was a computation of discharge at that section of the stream.

Velocity measurements were taken at 0.2 and 0.8 of the depth of each section and were averaged to give the velocity of the section. In extremely shallow conditions, velocity was measured at 0.6 of the depth from the water surface. Most of the boat measurements were done by use of a tag line which was used to position the boat at the selected section and to steady the boat in the current.

Rainfall

Rainfall measurements were made to supplement the data collected by the Meteorological Branch. An 8" diameter plastic funnel was used as a catcher and the precipitation was led through a plastic tube to a reservoir which gave a vertical magnification of 16:1. Changes in water level were measured by a Stevens float type recorder.

Snow Courses

Snow courses consisting of at least ten sample points spaced 100 feet apart were laid out in the bush so that typical average snow depths could be measured. The snow courses were sampled by a Mount Rose Sampler which involved the taking of a core of snow in a tube, recording the depth of snow, weighing the core and sampler, and calculating the water equivalent from the weight of the core.

Water Quality

Hach kits were employed to analyse samples of water in the field. Selected samples were sent to the Division of Laboratories of the Commission for testing and confirmation of field results. Conductivity meters were used to measure the electrical conductivity of samples in the field.

Sorting Coefficient (S_0)

The sorting coefficient gives an indication of the relative soil size distribution for samples taken at geological sections. It is computed from the results of the sieve analysis curve. It is the square root of the ratio of the third quartile size value over the first quartile size value where the third quartile is the coarser grain size. As S_0 approaches unity, the soil samples tend to consist of particles of one size. An S_0 value less than 2.5 is accepted as indicating a well-sorted sediment.

Lake Contours

Lake contours were determined by use of a small boat, driven by an outboard motor, and equipped with a Bendix DR23 depth recorder. The boat travelled at a constant speed, which was throttle controlled, along certain pre-determined traverses. A plot of the lake bottom was obtained. The values obtained were transferred to a map of suitable scale and bathymetric contours were drawn by interpolation between the plotted values.

The traverses were established to give adequate cover over the lakes investigated and were set up between prominent physical features such as points, peninsulas, and islands by use of aerial photographs. Large squares of fluorescent red plastic or hydrogen filled weather balloons established at the ends of the pre-determined traverses provided targets on which to sight the boat when making traverses.

Other Sources of Data

It should be noted that the data contained in this report are only those collected by the Ontario Water Resources Commission. Additional data are available from the following agencies:

Streamflow - Inland Waters Branch, Department of Energy,
Mines and Resources, Ottawa.

Snowcourse - Meteorology Branch, Department of Transport,
Ottawa.

- Ontario Hydro Electric Power Commission,
Toronto.

Rainfall - Meteorology Branch, Department of Transport,
Ottawa.

- Ontario Department of Lands and Forests, Dis-
trict Headquarters.

Geology - Ontario Department of Mines, Toronto.

- Geological Survey of Canada, Department of En-
ergy, Mines and Resources, Ottawa.

Chemical Analysis of Water - Ontario Department of Lands
and Forests, Toronto.

Bathymetric Contours of Lakes - Ontario Department of Lands
and Forests, Toronto.



Installing a float actuated recorder on a temporary stilling well for water level measurement during the summer months.

TABLE 1
STREAMFLOW
ALBANY RIVER BASIN
1968

STATION NUMBER: 43-01-003

LOCATION: Albany River at Petawanga Lake Narrows.
51°29'N, 88°25'W.

DRAINAGE AREA: 3,670 sq. miles

GAUGE: Float type - temporary stilling well

DAILY DISCHARGE IN CUBIC FEET PER SECOND										
Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1					7,119		12,030	12,350		
2							12,200	12,320		
3							12,450	12,100		
4							12,900	11,840		
5							13,370	11,500		
6							13,850	11,200		
7							14,300	10,800		
8							14,600	10,300		
9							14,850	10,250		
10							15,080	10,100		
11							15,200	9,900		
12							15,200	9,900		
13							15,000	9,920		
14							14,740	10,100		
15							14,550	10,480		
16					13,056		14,300	11,400		
17							14,100	12,270		
18							13,800	13,140		
19							13,600	14,100		
20				10,721			13,430	15,080		
21							13,200			
22			10,084				13,060			
23							13,000			
24							12,860			
25							12,750			
26							12,720			
27							12,700			
28							12,640			
29							12,620			
30						12,000	12,600			
31						12,000				

TABLE 2
STREAM FLOW
ALBANY RIVER BASIN
1968

STATION NUMBER: 43-01-008

LOCATION: Cat River at outflow of Wesleyan Lake.
51°11'N, 91°36'W.

DRAINAGE AREA: 2,080 sq. miles

GAUGE: Float type - temporary stilling well

DAILY DISCHARGE IN CUBIC FEET PER SECOND												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1								4,200	3,675	3,535		
2								4,170	3,705	3,510		
3								4,050	3,690	3,480		
4								4,000	3,705	3,420		
5								4,090	3,750	3,375		
6						4,220			3,770	3,360		
7									3,770	3,375		
8									3,770	3,375		
9									3,750	3,360		
10									3,725	3,345		
11									3,725	3,345		
12									3,730	3,390		
13									3,690	3,575		
14									3,690	3,580		
15									3,690	3,600		
16									3,660	3,630		
17									3,660	3,640		
18									3,640	3,640		
19									3,620	3,690		
20									3,580	3,705		
21							5,020		3,560	3,690		
22							4,980	3,375	3,560	3,675		
23							4,920	3,345	3,630	3,660		
24							4,860	3,390	3,630			
25							4,800	3,495				
26					2,075		4,710	3,495				
27							4,635	3,495				
28							4,545	3,495				
29						4,998	4,430	3,510	3,560			
30							4,380	3,535	3,550			
31							4,290	3,630				

TABLE 3
STREAM FLOW
ALBANY RIVER BASIN
1968

STATION NUMBER: 43-01-013

LOCATION: Kawashkagama River 2,000 feet upstream from O'Sullivan Lake.
50°26'N, 87°09'W.

DRAINAGE AREA: 765 sq. miles.

GAUGE: Float type - temporary stilling well

DAILY DISCHARGE IN CUBIC FEET PER SECOND												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1									1,540	613		
2							1,406		1,470	610		
3									1,380	608		
4								1,962	1,345	590		
5									1,300	595		
6									1,243	574		
7									1,185	570		
8									1,150	574		
9									1,095	590		
10									1,060	605		
11						1,398			1,020	613		
12						1,419			990	613		
13									958	623		
14									920	640		
15									875	650		
16		287							855	675		
17					1,860				838	708		
18									803	750		
19									785	783		
20			178						778	800		
21									730	833		
22						1,844			715	937		
23									708			
24									695			
25					1,774				684			
26									672			
27									650			
28									640			
29												
30								1,645	628			
31								1,640	620			
								1,600				

TABLE 4
STREAM FLOW
ALBANY RIVER BASIN
1968

STATION NUMBER: 43-01-017

LOCATION: Moberley Lake narrows

49°36'N, 90°34'W.

DRAINAGE AREA: 450 sq. miles

GAUGE: Float type - temporary stilling well

DAILY DISCHARGE IN CUBIC FEET PER SECOND												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1									1,273	525		
2									1,235	520		
3									1,190	515		
4									1,182	510		
5									1,170	505		
6									1,130	510		
7									1,100	505		
8									1,055	500		
9									1,018	550		
10									980	595		
11									930	630		
12									900	650		
13									870	670		
14									830	680		
15						2,734			800	705		
16									775	780		
17									738	850		
18							982		715	940		
19									690	985		
20									670	1,030		
21									655	1,035		
22								440	645	1,040		
23					1,471			553		1,055		
24								848				
25								1,088				
26								1,250				
27								1,310				
28						1,650		1,345				
29								1,340				
30								1,310	540			
31								1,295				

TABLE 5
STREAMFLOW
ALBANY RIVER BASIN
1968

STATION NUMBER: 43-01-020

LOCATION: Opichuan River at Kellow Lake narrows.

51°10'N, 87°46'W.

DRAINAGE AREA: 440 sq. miles

GAUGE: Float type - temporary stilling well

DAILY DISCHARGE IN CUBIC FEET PER SECOND												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1				147					793	440		
2							738		790	435		
3									775	430		
4										430		
5										423		
6										428		
7										410		
8										410		
9										243		
10										455		
11										460		
12										458		
13										453		
14										455		
15										492		
16										568		
17							888			657		
18										700		
19		150				902				720		
20										754		
21								703				
22					1,549			674				
23								730				
24								812				
25								823				
26								823				
27								820				
28								820				
29								810				
30								810				
31								808				

TABLE 6
STREAMFLOW
ALBANY RIVER BASIN
1968

STATION NUMBER: 43-01-021

LOCATION: Pashkokogan River 1.5 miles downstream from outflow of
Pashkokogan Lake.

DRAINAGE AREA: 875 sq. miles

GAUGE: Float type - temporary stilling well

DAILY DISCHARGE IN CUBIC FEET PER SECOND												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1								1, 580				
2								1, 565				
3								1, 555				
4								1, 508				
5								1, 498				
6								1, 515				
7								1, 522				
8								1, 527				
9								1, 515				
10								1, 515				
11								1, 498				
12								1, 485				
13								1, 468				
14							1, 906	1, 498				
15								1, 430				
16								1, 428				
17						2, 196		1, 425				
18								1, 428				
19								1, 428				
20								1, 485				
21								1, 415				
22							1, 820	1, 390				
23					1, 417		1, 740	1, 400				
24							1, 740	1, 428				
25							1, 730	1, 485				
26							1, 710	1, 485				
27							1, 655	1, 485				
28							1, 655	1, 485				
29							1, 575	1, 498				
30						2, 042	1, 560	1, 485				
31							1, 560					

TABLE 7
STREAMFLOW
SEVERN RIVER BASIN
1968

STATION NUMBER: 47-01-003

LOCATION: Flanagan River at Northwind Lake Dam.

52°49'N, 93°27'W.

DRAINAGE AREA: 1,063 sq. miles

GAUGE: Float type to Aug. 27. Pressure bulb type from Aug. 27 to Oct. 23.

DAILY DISCHARGE IN CUBIC FEET PER SECOND												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1							1,970	1,918	1,564	1,708		
2							1,986	1,902	1,566	1,690		
3							2,018	1,876	1,564	1,688		
4							2,020	1,860	1,562	1,668		
5							2,022	1,842	1,562	1,648		
6							2,040	1,830	1,562	1,650		
7							2,042	1,788	1,560	1,646		
8							2,058	1,764	1,560	1,646		
9							2,080	1,738	1,560	1,672		
10							2,096	1,702	1,598	1,760		
11							2,116	1,672	1,596	1,830		
12							2,118	1,646	1,540	1,902		
13							2,098	1,626	1,536	1,944		
14							2,094	1,606	1,528	1,986		
15							2,080	1,598	1,524	1,992		
16						1,573	2,078	1,584	1,564	2,000		
17							2,064	1,586	1,596	2,028		
18							2,040	1,598	1,648	2,020		
19								1,606	1,690	2,028		
20								1,628	1,728	2,028		
21								1,650	1,752	2,020		
22							2,058	1,648	1,772	2,020		
23							2,044	1,672	1,768	2,012		
24							2,048	1,648				
25							2,046	1,646				
26					1,096	1,880	2,016	1,628				
27						1,882	1,988	1,608				
28						1,880	1,988	1,598	1,744			
29						1,878	1,970	1,584	1,728			
30						1,902	1,940	1,582	1,708			
31							1,920	1,580				

TABLE 8
STREAMFLOW
SEVERN RIVER BASIN
1968

STATION NUMBER: 47-01-006

LOCATION: Morrison River at Sachigo Lake.

53°48'N, 91°50'W.

DRAINAGE AREA: 259 sq. miles

GAUGE: Float type - temporary stilling well

DAILY DISCHARGE IN CUBIC FEET PER SECOND												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1								348	375	368		
2								350	393	362		
3								350	405	352		
4								352	420	352		
5								347	420	352		
6								348	420	352		
7								342	413	350		
8								340	413	350		
9								332	412	352		
10								332	405	367		
11								330	400	373		
12								327	392	382		
13								334	403	389		
14								338	380	388		
15								333	373	388		
16								330	373	403		
17						517		332	373	392		
18								334	382	398		
19								338	383	398		
20								342	380	403		
21								350	373	405		
22								350	380	392		
23								350	389	388		
24								347	373	392		
25								350	372	392		
26							320	352				
27					306	598	318	352	380			
28							328	350	380			
29							332	350	373			
30							334	354	372			
31							335	362				

TABLE 9
STREAM FLOW
SEVERN RIVER BASIN
1968

STATION NUMBER: 47-01-007

LOCATION: Sachigo River 9 miles downstream from Sachigo Lake.
54°05'N, 92°08'W.

DRAINAGE AREA: 1,610 sq. miles

GAUGE: Float type - temporary stilling well

DAILY DISCHARGE IN CUBIC FEET PER SECOND												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1								2, 200	2, 330	2, 810		
2								2, 175	2, 412	2, 690		
3								2, 175	2, 525	2, 575		
4								2, 250	2, 525	2, 700		
5								2, 150	2, 525	2, 750		
6								2, 175	2, 560	2, 690		
7								2, 162	2, 550	2, 690		
8								2, 136	2, 575	2, 680		
9								2, 064	2, 625	2, 664		
10								2, 075	2, 575	2, 700		
11								2, 112	2, 625	2, 775		
12								2, 050	2, 600	2, 825		
13								2, 036	2, 575	2, 825		
14								2, 175	2, 550	2, 820		
15								2, 125	2, 612	2, 750		
16								2, 030	2, 538	2, 825		
17						1, 529		2, 112	2, 550	2, 735		
18								2, 125	2, 664	2, 850		
19								2, 000	2, 750	2, 810		
20								2, 075	2, 700	2, 850		
21								2, 136	2, 735	2, 820		
22								2, 136	2, 925	2, 680		
23								2, 036	2, 950	2, 625		
24							2, 176	2, 150	2, 825	2, 750		
25							1, 935	2, 275	2, 810			
26							1, 935	2, 300				
27					2, 416	2, 113	1, 882	2, 275				
28							2, 030	2, 285	2, 900			
29							2, 400	2, 265	2, 825			
30							2, 136	2, 175	2, 715			
31							2, 150	2, 162				

TABLE 10
STREAM FLOW
SEVERN RIVER BASIN
1968

STATION NUMBER: 47-01-008

LOCATION: Sachigo River 9 miles upstream from Sachigo Lake.
53°42'N, 92°17'W.

DRAINAGE AREA: 779 sq. miles.

GAUGE: Float type - temporary stilling well

DAILY DISCHARGE IN CUBIC FEET PER SECOND												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1								1,470	1,430	1,140		
2								1,500	1,540	1,070		
3								1,445	1,590	975		
4								1,340	1,540	900		
5								1,230	1,480	884		
6								1,144		900		
7								1,045		936		
8								1,005		950		
9								975		983		
10								884		1,240		
11								840		1,470		
12								800		1,590		
13								875		1,580		
14								950		1,485		
15								930		1,445		
16								900		1,400		
17								845		1,390		
18						1,365		810		1,375		
19								984		1,340		
20								1,230		1,305		
21								1,370		1,240		
22								1,385		1,175		
23								1,330		1,120		
24								1,240		1,120		
25								1,150				
26								1,070				
27					1,991	1,283		975				
28							1,670	875	1,346			
29							1,610	808	1,288			
30							1,430	835	1,196			
31							1,430	1,105				



Stream gauging under normal open water conditions; the current meter is suspended from a boat which is positioned by means of a tag line.



Stream gauging on the Severn River using Stadia readings and walkie-talkies to position the boat and measure distances from shore because of the great width of the river.

TABLE 11
STREAM FLOW
ALBANY RIVER BASIN

STATION				DRAINAGE AREA sq. miles	DISCHARGE	
Name and Description	Number	Lat. N.	Long. W.		Date	cfs
Albany River at Rorabeck Lake	43-01-001	51°22'	89°26'	1,250	Sept. 1/66	1,479
					Sept. 12/66	1,213
					Oct. 25/66	908
					Apr. 6/67	690
					June 10/67	3,432
Albany River above Frenchman's Rapids	43-01-002	51°23'	87°47'	5,945	June 13/67	3,186
					June 18/67	2,877
					Aug. 8/67	5,760
Albany River at Petawanga Lake narrows	43-01-003	51°29'	88°25'	3,670	Aug. 10/67	3,018
Attwood River above Gowie Bay	43-01-004	51°22'	87°57'	495	Aug. 29/67	996
Attwood River at outlet of Attwood Lake	43-01-005	51°16'	88°17'	420	Aug. 22/67	448

NOTE: All discharges were obtained by the current meter method unless designated by the following subscripts.

r - automatic stage recorder
s - staff gauge

TABLE 11 (continued)
STREAM FLOW
ALBANY RIVER BASIN

STATION				DRAINAGE AREA	DISCHARGE	
Name and Description	Number	Lat. N.	Long. W.		Date	cfs
Balkham Creek at bridge on Cordingly Lake Rd.	43-01-006	50°11'	86°43'	29.5	Aug. 8/68 Sept. 4/68 Sept. 18/68	28.5 28.6 16.6
Balkham Creek at bridge on Kimberly Clark Rd.	43-01-007	50°11'	86°43'	42.8	July 30/68 July 31/68 Aug. 10/68 Sept. 5/68 Sept. 18/68	78.3 91.3 38.0 46.7 21.6
Cat River at outflow of Wesleyan Lake	43-01-008	51°11'	91°36'	2,080	July 9/67 Aug. 15/67 Oct. 22/67	3,380 2,642 642
Cheepay River near confluence with the Albany R.	43-01-009	51°27'	83°26'	1,335	Aug. 2/68	3,040

NOTE: All discharges were obtained by the current meter method unless designated by the following subscripts.

r - automatic stage recorder

s - staff gauge

TABLE 11 (continued)
STREAM FLOW
ALBANY RIVER BASIN

STATION				DRAINAGE AREA sq. miles	DISCHARGE	
Name and Description	Number	Lat. N.	Long. W.		Date	cfs
Eabamet River at outlet of Eabamet Lake	43-01-011	51°31'	87°45'	820	Aug.12/67	814
					May22/68	3,065
					June18/68	2,008
					June18/68	2,065
					June30/68	2,357
					July19/68	908
Flint River at CNR Pagwa Line crossing	43-01-012	50°03'	85°37'	215	Sept.30/68	832
					June29/67	333
					Aug.30/67	256
					Sept.30/67	52
					Feb.22/68	41
					Mar.22/68	45
					May20/68	452
					June10/68	308
					June11/68	315
					June24/68	338
					June24/68	352
					July11/68	315
					Aug.20/68	312

NOTE: All discharges were obtained by the current meter method unless designated by the following subscripts.

r - automatic stage recorder

s - staff gauge

TABLE 11 (continued)
STREAM FLOW
ALBANY RIVER BASIN

STATION				DRAINAGE AREA sq. miles	DISCHARGE	
Name and Description	Number	Lat. N.	Long. W.		Date	cfs
Kawashkagama River upstream from O'Sullivan Lake	43-01-013	50°26'	87°09'	765	July 3/67 Aug. 14/67 Sept. 29/67	1, 040 646 360
Kenogami River at CNR Pagwa Line	43-01-014	50°04'	85°47'	620	June 30/67 Aug. 11/67 Sept. 29/67 Feb. 22/68 Mar. 22/68 May 21/68 June 23/68 July 11/68	970 690 174 137 166 1, 274 3, 318 1, 075
Kenogami River below confluence with Little Current River	43-01-015	50°58'	84°36'	17, 620	Aug. 29/68	44, 800
Keezhik and Troutfly creeks at outlet of Curry Bay	43-01-010	51°36'	86°36'	240	Aug. 7/67	345

NOTE: All discharges were obtained by the current meter method unless designated by the following subscripts.

r - automatic stage recorder
s - staff gauge

TABLE 11 (continued)
STREAMFLOW
ALBANY RIVER BASIN

STATION				DRAINAGE AREA sq. miles	DISCHARGE	
Name and Description	Number	Lat. N.	Long. W.		Date	cfs
Little Current River below confluence with Muriel River	43-01-016	50°42'	86°27'	2, 180	Aug.27/66	1, 314
					Oct. 10/66	1, 787
					Apr. 6/67	603
					June 8/67	6, 643
					June 12/67	5, 938
Moberley Lake narrows	43-01-017	49°36'	90°34'	450	June 17/67	5, 081
					July 19/67	297
Muswabik River at outlet of Muswabik Lake	43-01-018	51°32'	85°05'	730	Aug. 16/67	391
					Oct. 19/67	200
Ogoki River below Harrogate Lake	43-01-019	50°53'	86°49'	920	July 26/68	623
					July 30/67	808
Opichuan River at Kellow Lake narrows	43-01-020	51°10'	87°46'	440	Aug. 22/67	468
Pashkokogan River at outflow of Pashkokogan Lake	43-01-021	51°03'	90°12'	875	July 15/67	1, 121
					Oct. 23/67	375

NOTE: All discharges were obtained by the current meter method unless designated by the following subscripts.

r - automatic stage recorder

s - staff gauge

TABLE 11 (continued)
STREAM FLOW
ALBANY RIVER BASIN

STATION				DRAINAGE AREA sq. miles	DISCHARGE	
Name and Description	Number	Lat. N.	Long. W.		Date	cfs
Seseganaga Lake outlet (western)	43-01-022	50°10'	90°18'	1, 225	July 18/67 Aug. 16/67 Oct. 19/67	1, 219 953 526

NOTE: All discharges were obtained by the current meter method unless designated by the following subscripts.

r - automatic stage recorder

s - staff gauge



Bedrock controls such as this one on the Flint River provide consistent stage-discharge relationships from year to year.



A small dam on the Flanagan River provides an excellent control and site for a permanent water level recorder.

TABLE 12
STREAMFLOW
ATTAWAPISKAT RIVER BASIN

STATION				DRAINAGE AREA sq. miles	DISCHARGE	
Name and Description	Number	Lat. N.	Long. W.		Date	cfs
Dobie River at Nanos Lake narrows	44-01-001	51°37'	90°32'	425	July 5/67 Aug. 15/67 Oct. 22/67	452 301 78
Lysander Creek at outflow into Badesdawa Lake	44-01-002	51°51'	89°41'	92	July 6/67	32

NOTE: All discharges were obtained by the current meter method unless designated by the following subscripts.

r - automatic stage recorder

s - staff gauge

TABLE 13
STREAM FLOW
EKWAN RIVER BASIN

STATION					DRAINAGE AREA		DISCHARGE	
Name and Description	Number	Lat. N.	Long. W.		sq. miles	Date	cfs	
Ekwon River upstream from Flint Rapids	45-01-001	53°30'	83°47'		6,500	Aug. 12/66	2,576	

NOTE: All discharges were obtained by the current meter method unless designated by the following subscripts.

r - automatic stage recorder

s - staff gauge

TABLE 14
STREAMFLOW
MOOSE RIVER BASIN

STATION				DRAINAGE AREA		DISCHARGE	
Name and Description	Number	Lat. N.	Long. W.	sq. miles		Date	cfs
Missinaibi River	42-01-001	50°36'	82°06'	8,850		Sept. 9/66	3,473

NOTE: All discharges were obtained by the current meter method unless designated by the following subscripts.

r - automatic stage recorder

s - staff gauge

TABLE 15
STREAMFLOW
SEVERN RIVER BASIN

STATION				DRAINAGE AREA sq. miles	DISCHARGE	
Name and Description	Number	Lat. N.	Long. W.		Date	cfs
Beaver River one mile from confluence with Severn River	47-01-001	55°55'	87°50'	2, 075	Aug.11/66	598
Fawn River at outflow of Fawn Lake	47-01-002	53°47'	90°32'	202	July13/67 Aug25/67	179 58
Flanagan River at outflow of Northwind Lake	47-01-003	52°49'	93°27'	1, 063	Aug.26/67 Oct.18/67	775 355
Makoop River entrance to Severn Lake	47-01-004	53°46'	90°52'	1, 675	Aug.9/66 Oct.26/66	2, 121 1, 530
Mishwamakan River 1.5 miles upstream from Big Trout Lake	47-01-005	53°40'	90°07'	393	July10/67 Aug25/67 Oct.15/67 Mar26/68	274 119 72 20

NOTE: All discharges were obtained by the current meter method unless designated by the following subscripts.

r - automatic stage recorder

s - staff gauge

TABLE 15 (continued)
STREAMFLOW
SEVERN RIVER BASIN

STATION				DRAINAGE AREA sq. miles	DISCHARGE	
Name and Description	Number	Lat. N.	Long. W.		Date	cfs
Sachigo River nine miles downstream from Sachigo Lake	47-01-007	54°05'	92°08'	1,610	July 18/67 Aug. 29/67 Oct. 16/67	2,589 1,179 812
Sachigo River nine miles upstream from Sachigo Lake	47-01-008	53°42'	92°17'	779	July 19/67 Aug. 30/67 Oct. 16/67	669 119 284
Schade River one mile downstream from Misiwaweya Lake	47-01-009	53°33'	91°03'	1,170	July 17/67 Aug. 24/67 Oct. 15/67 Feb. 14/68 May 28/68 June 15/68 June 26/68 July 23/68 Aug. 26/68 Sept. 27/68	1,092 670 309 215 1,543 1,970 1,796 1,462 2,149 1,467

NOTE: All discharges were obtained by the current meter method unless designated by the following subscripts.

r - automatic stage recorder
s - staff gauge

TABLE 15 (continued)
STREAMFLOW
SEVERN RIVER BASIN

STATION				DRAINAGE AREA sq. miles	DISCHARGE	
Name and Description	Number	Lat. N.	Long. W.		Date	cfs
Severn River outlet of Deer Lake	47-01-010	52°39'	93°58'	1,543	Aug.15/66	940
Severn River one mile upstream from Limestone Rapids	47-01-011	55°23'	88°19'	35,880	July16/67	45,176
					Aug.27/67	22,680
					Sept.27/67	12,535
					Feb.10/68	5,538
					Mar.27/68	4,666
					May.29/68	17,840
					June.19/68	31,207
					June.28/68	33,133
					July.30/68	38,825
					Aug.25/68	37,970
					Sept.26/68	47,847

NOTE: All discharges were obtained by the current meter method unless designated by the following subscripts.

r - automatic stage recorder

s - staff gauge

TABLE 16
STREAM FLOW
WINISK RIVER BASIN

STATION				DRAINAGE AREA sq. miles	DISCHARGE	
Name and Description	Number	Lat. N.	Long. W.		Date	cfs
Asheweig River upstream from Long Dog Lake	46-01-001	53°27'	89°16'	1,287	Aug. 8/66	1,560
					June 9/67	6,089
					June 12/67	4,883
					June 18/67	3,682
Fishbasket River	46-01-002	52°40'	87°53'	376	July 25/67	308
					Aug. 21/67	234
					Sept. 22/67	205
Morris River	46-01-003	52°00'	91°03'		July 24/67	436
					Aug. 15/67	284
Peagwon Creek one mile upstream from Wunnummin Lake	46-01-004	52°47'	88°40'	308	May 28/68	536
					June 18/68	457

NOTE: All discharges were obtained by the current meter method unless designated by the following subscripts.

r - automatic stage recorder

s - staff gauge



Stream gauging under ice conditions; a current meter lowered through a hole drilled in the ice measures the velocity of the stream.



Measurement of snow depth and density by a Mount Rose sampler on a ten point snow course at Pickle Lake.

TABLE 18
RAINFALL
DAILY PRECIPITATION IN INCHES

GAUGE: Recording OWRC type.

Basin		Severn River						Albany River				
Station No.		47-03-001				47-03-002		43-03-001		43-03-002		
Station Location		Flanagan River at outflow of Northwind Lake				Severn R. at Limestone Rapids		Moberley Lake at narrows		Petawanga Lake narrows		
Lat. N.		52°49'				55°23'		49°37'		51°29'		
Long. W.		93°27'				88°19'		90°34'		88°25'		
Date	June	July	Aug	Sept	Oct	July	Aug	July	Aug	Aug	Sept	Oct
1	x	-	0.18	-	0.20	x	-	x	x	x	-	0.05
2	x	-	-	-	-	x	-	x	x	x	-	-
3	x	-	-	0.12	0.06	x	-	x	x	x	0.12	-
4	x	-	0.18	0.08	-	x	-	x	x	x	0.04	-
5	x	0.38	0.12	0.03	0.26	x	-	x	x	x	0.14	0.02
6	x	-	-	0.06	0.22	x	-	x	x	x	-	-
7	x	0.11	-	-	0.04	x	-	x	x	x	-	-
8	x	-	0.04	-	0.91	x	0.32	x	x	x	-	0.13
9	x	-	-	-	0.13	x	0.08	x	x	x	-	0.54
10	x	-	0.04	-	x	x	0.13	x	x	x	-	-
11	x	-	-	-	x	x	0.06	x	x	x	-	-
12	x	-	-	-	x	x	-	x	x	x	-	-
13	x	-	-	-	x	x	-	x	x	x	-	-
14	x	-	-	-	x	x	-	x	x	x	-	0.14
15	x	-	-	-	x	x	0.10	x	x	x	-	-
16	0.06	-	-	0.58	x	x	-	x	x	x	-	-
17	-	-	-	-	x	x	-	x	x	x	0.02	-
18	-	-	-	-	x	x	0.30	x	x	x	-	-
19	0.11	x	-	0.11	x	x	0.54	0.10	x	x	0.16	-
20	0.36	x	-	-	x	x	-	0.03	x	x	0.10	-
21	0.16	x	-	0.14	x	x	-	0.10	x	x	-	-
22	-	-	-	-	x	x	-	0.38	x	x	0.21	x
23	-	0.14	-	-	x	x	-	0.29	x	x	0.24	x
24	-	-	-	-	x	x	-	-	x	x	0.32	x
25	-	0.30	-	x	x	x	x	-	x	x	0.03	x
26	-	-	0.08	x	x	x	x	0.36	x	x	-	x
27	0.06	-	-	x	x	x	x	0.06	x	x	-	x
28	0.08	-	-	-	x	x	x	0.02	x	x	-	x
29	-	0.56	0.08	-	x	x	x	-	x	x	-	x
30	0.62	0.25	0.46	-	x	x	x	x	x	0.04	-	x
31	x	0.02	0.13	x	x	x	x	x	x	x	-	x

x no record of precipitation available
- no precipitation

TABLE 19
MECHANICAL ANALYSES OF OVERBURDEN SAMPLES
ALBANY RIVER BASIN

LOCATION			Sample No.	FIELD DESCRIPTION	Depth Below Surface (feet)	Per Cent by Wt.			
Latitude North	Longitude West	Field Location				Clay	Silt	Sand	So
50°27'	87°10'	½ mile south of Kawashkagama R.	RW67-1	grey, clayey silt	6	←61→	35	4	
49°35'	90°35'	½ mile east of Moberley Lake.	RW67-10	white fine grained sand	4	←60→	40	0	
51°24'	87°46'	north shore, Albany River, Frenchman's Rapids.	RW67-20	sand and gravel ridge	3	0	0	64	36
50°10'	86°48'	Hwy. 584, 5 miles south of Nakina.	RW67-2	sandy till	3	←58→	38	3	
50°11'	86°48'	Hwy. 584, 4 miles south of Nakina.	RW67-3	sandy till	3	←35→	61	4	3.40
51°01'	90°14'	south shore, Pashkokogan L.	RW67-30	sandy till	3	←17→	63	20	4.40

TABLE 19 (continued)
MECHANICAL ANALYSES OF OVERBURDEN SAMPLES
ALBANY RIVER BASIN

LOCATION			Sample No.	FIELD DESCRIPTION	Depth Below Surface (feet)	Per Cent by Wt.			
Latitude North	Longitude West	Field Location				Clay	Silt	Sand	So Gravel
51°02'	90°20'	north shore, Pashkokogan L.	RW67-6	silt to coarse gravel	4	←35→	→55	10	
51°01'	90°20'	south shore, Pashkokogan L.	RW67-7	grey sand and gravel	4	←16→	→59	25	3.05
50°05'	90°20'	south shore, Seseganaga L.	RW67-8	fine sand and silt	5	←62→	→36	2	
50°09'	90°16'	north shore Seseganaga L.	RW67-9	well sorted medium-fine sand	8	0	0	100	0 1.32
51°24'	87°46'	north shore, Albany River, Frenchman's Rapids.	RW67-21	sand and gravel ridge	3	←1→	→21	78	
51°24'	87°45'	north shore, Albany River, Frenchman's Rapids.	RW67-22	sand and gravel ridge	3	0	0	39	61

TABLE 19 (continued)
MECHANICAL ANALYSES OF OVERBURDEN SAMPLES
ALBANY RIVER BASIN

LOCATION			Sample No.	FIELD DESCRIPTION	Depth Below Surface (feet)	Per Cent by Wt.			
Latitude North	Longitude West	Field Location				Clay	Silt	Sand	So
51°08'	90°30'	island at north-east end of Lake St. Joseph.	RW67-29	sandy till	2	←33→	57	10	6.95
51°11'	91°36'	south shore, Wesleyan Lake.	RW67-4	sandy till	4	←13→	62	25	4.08
51°01'	90°20'	½ mile north of Pashkokogan L.	RW67-5	coarse sand and gravel ridge	6	0	0	74	1.47
50°03'	85°37'	Flint River near CNR track.	GH67-64	grey-brown silt	4	←57→	41	2	

TABLE 20
MECHANICAL ANALYSES OF OVERBURDEN SAMPLES
ATTAWAPISKAT RIVER BASIN

LOCATION			Sample No.	FIELD DESCRIPTION	Depth Below Surface (feet)	Per Cent by Wt.			
Latitude North	Longitude West	Field Location				Clay	Silt	Sand	So
52°18'	85°12'	shore of Missisa Lake.	GH67-13	light grey sandy clay	6	↔ 33 ↔	↔ 59 ↔	8	3.44
52°37'	51°48'	northeastern end of Badesdawa L.	GH67-27	well-sorted very fine sand and silt	6	↔ 12 ↔	↔ 86 ↔	2	1.99

TABLE 21
MECHANICAL ANALYSES OF OVERBURDEN SAMPLES
SEVERN RIVER BASIN

LOCATION			Sample No.	FIELD DESCRIPTION	Depth Below Surface (feet)	Per Cent by Wt.			
Latitude North	Longitude West	Field Location				Clay	Silt	Sand	So
53°51'	92°16'	shore of Sachigo Lake.	GH67-45	sand and gravel ridge	3	0	0	40	60 2.09
53°43'	92°20'	Sachigo Hills.	GH67-156B	poorly-sorted sand and gravel	1	↔54↔	↔4↔	77	46 1.67
53°43'	92°20'	Sachigo Hills.	GH67-156A	well-sorted fine sand	$\frac{1}{2}$	↔4↔	↔4↔	77	19 2.46
53°43'	92°20'	Sachigo Hills.	GH67-156C	well-sorted medium sand	2	↔11↔	↔11↔	81	8 1.38
53°49'	92°08'	shore of Sachigo Lake.	GH67-50	well-sorted medium sand	4	↔2↔	↔2↔	98	0 1.24

TABLE 22
MECHANICAL ANALYSES OF OVERBURDEN SAMPLES
WINISK RIVER BASIN

LOCATION			Sample No.	FIELD DESCRIPTION	Depth Below Surface (feet)	Per Cent by Wt.			
Latitude North	Longitude West	Field Location				Clay	Silt	Sand	Gravel
53° 50'	87° 02'	near Gneiss Rapids.	GH68-79	well sorted fine sand	4	← 21 →	70	9	1.91
54° 15'	87° 15'	Winisk Indian Reserve 90.	GH68-92	well sorted very fine sand	4	← 51 →	49	0	
53° 13'	89° 56'	Ashweig River north of Kingfisher Lake.	GH68-25	fine sandy silt	4	← 56 →	44	0	
53° 02'	89° 40'	shore of Kingfisher Lake.	GH68-18	fine sandy silt	4	← 81 →	19	0	
52° 00'	91° 03'	shore of Morris River.	GH67-57	sand and gravel ridge	4	← 20 →	66	24	2.87

TABLE 23
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°38'	85°55'	$\frac{1}{2}$ mile down-stream of Ogoki Post on Albany River.	Al-1	0- $\frac{1}{2}$ $\frac{1}{2}$ -10	organic material, roots, decomposed leaves horizontal, thinly bedded very fine sand, grades into next unit
				10-15 15-16 16-50	interlayered fine-medium sand and fine gravel fine to coarse gravel slump material
51°38'	85°52'	north shore, Albany River.	Al-2	0- $\frac{1}{2}$ $\frac{1}{2}$ -20	organic material, roots, decomposed leaves clayey till, sedimentary and volcanic rock fragments
51°38'	85°48'	north shore, Albany River, $\frac{1}{2}$ mile below Ruby Creek.	Al-3	0- $\frac{1}{2}$ $\frac{1}{2}$ -25	organic material clayey till with small sandy pockets
51°38'	85°44'	north shore, Albany River.	Al-4	0- $\frac{1}{2}$ $\frac{1}{2}$ -19 19-25	organic material, roots, decomposed leaves clayey till, 2 inch band of red clay situated 3 feet from top of unit slump material

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°39'	85°40'	north shore, Albany River, opposite Wabi-meig Creek.	Al - 5	0- $\frac{1}{2}$ $\frac{1}{2}$ -30	organic material, roots decomposed leaves clayey silty till
51°39'	85°29'	south shore, Albany River $\frac{1}{2}$ mile below Gander River.	Al - 7	0- $\frac{1}{2}$ $\frac{1}{2}$ -4 $\frac{1}{2}$ 4 $\frac{1}{2}$ -6 $\frac{1}{2}$ 6 $\frac{1}{2}$ -10 10-50	organic material, roots, decomposed leaves clayey till cobbles and gravel dense, fractured blue till slump material
51°39'	85°28'	south shore, Albany River, 1 mile below Gander River.	Al - 8	0- $\frac{1}{2}$ $\frac{1}{2}$ -15 15-35 35-50 50-55	organic material, roots, decomposed leaves clayey till with coarse sand and fine to medium gravel blue clay with some silt, dense, (3/4 inch wide layer of compressed peat at the bottom of this unit) cross-bedded sands and gravel slump material

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°37'	85°26'	south shore, Albany River.	Al - 9	0- $\frac{1}{2}$ $\frac{1}{2}$ -20 20-30 30-50	organic material, roots, decomposed leaves clayey till sand, gravels and cobbles clayey till, slightly blue when damp
51°35'	85°24'	south shore, Albany River	Al - 10	0- $\frac{1}{2}$ $\frac{1}{2}$ -35 35-50	organic material, roots, decomposed leaves brown silty till, discontinuous nine-inch band of gravel runs horizontal, 25 feet from top of unit slump material
51°34'	85°21'	south shore, Albany River	Al - 11	0- $\frac{1}{2}$ $\frac{1}{2}$ -15 15-50	organic material, roots, decomposed leaves sand, gravel and cobbles blue clayey till
51°32'	85°19'	north shore Albany River	Al - 12	0- $\frac{1}{2}$ $\frac{1}{2}$ -15 15-35	organic material, roots, decomposed leaves brown clayey till dark grey silty clay in horizontal beds approximately 1 inch thick, at 35 feet is a 3 inch layer of well-sorted medium gravel containing abundant water
				35-50	dark grey silty clay in horizontal beds

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°31'	85°18'	south shore, Albany River.	Al-13	0- $\frac{1}{2}$ $\frac{1}{2}$ -35 35-75	organic material, roots, decomposed leaves blue clayey till dark blue clay
51°31'	85°15'	island in Albany River.	Al-14	0- $\frac{1}{2}$ $\frac{1}{2}$ -4 $\frac{1}{2}$ 4 $\frac{1}{2}$ -12 12-30	organic material, roots, decomposed leaves well-sorted fine sand horizontally bedded gravels and small cobbles blue clay
51°30'	85°12'	north shore, Albany River.	Al-15	0- $\frac{1}{2}$ $\frac{1}{2}$ -15 15-40	organic material, roots, decomposed leaves brown clayey silty till; very fine fracture pattern blue-grey clayey till; displays conchoidal fracture pattern; contains sand lenses approximately $\frac{1}{2}$ inch thick and nine inches long
51°27'	85°10'	north shore, Albany River.	Al-17	40-60 0- $\frac{1}{2}$ $\frac{1}{2}$ -5 5-6 6-37 37-40	slump material organic material, roots, decomposed leaves clayey till, rock fragments of limestone, siltstone and volcanics well-sorted medium gravel clayey till, same composition as upper till unit alluvium

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°25'	85°08'	south shore, Albany River.	Al-18	0- $\frac{1}{2}$ $\frac{1}{2}$ -20	organic material, roots, decomposed leaves brown clayey till, sub-angular sedimentary rock fragments
				20-21	well-sorted medium gravel
				21-45	blue-grey clayey till
				45-50	alluvium
51°25'	85°06'	south shore, Albany River.	Al-19	0- $\frac{1}{2}$	organic material, roots, decomposed leaves, sphagnum moss
				$\frac{1}{2}$ -5	brown clayey till
				5-8	well-sorted medium-to-coarse gravel
				8-46 46-50	blue-grey clayey till alluvium
51°24'	85°04'	opposite mouth of Muswabik R.	Al-20	0- $\frac{1}{2}$ $\frac{1}{2}$ -4	organic material, roots, decomposed leaves horizontally bedded fine sand
				4-12	horizontally bedded medium-to coarse gravels
				12-13	brown clayey till
				13-52 52-54	blue-grey clayey till alluvium

TABLE 23(continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°24'	85°03'	north shore, Albany River.	Al -21	0- $\frac{1}{2}$	organic material, roots, decomposed leaves, sphagnum moss
				$\frac{1}{2}$ -30	brown clayey till, sedimentary and volcanic rock fragments
				30-33	well-sorted medium gravel
				33-54 54-56	blue clayey till, dense, highly fractured alluvium
51°23'	85°03'	south shore, Albany River.	Al -22	0- $\frac{1}{4}$	organic material, roots, decomposed leaves, sphagnum moss
				$\frac{1}{4}$ -15	brown clayey till
				15-17	well-sorted medium gravel
				17-32 32-36	blue, highly fractured, clayey till alluvium
51°17'	85°54'	north shore, Albany River.	Al -25	0- $\frac{1}{2}$	organic material, roots, decomposed leaves
				$\frac{1}{2}$ -30	light brown clayey silty till
				30-32	medium sand to medium gravel; water seepage
				32-50 50-53	calcareous siltstone, pale green-grey colour, highly fractured horizontal bedding alluvium

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°14'	84°50'	north shore, Albany River.	Al-26	0-1	organic material, roots, decomposed leaves, peat brown clayey silty till medium sand with small gravel fraction clayey till grades down into clayey silty blue till grey-blue clay; conchoidal fracture, some rock fragments alluvium
				1-15	
				15-17	
				17-40	
				40-70	
				70-74	
51°12'	84°48'	north shore, Albany River.	Al-27	0- $\frac{1}{4}$	organic material, roots, decomposed leaves brown clayey till medium sand to medium gravel grey-green, calcareous siltstone, horizontal bedding highly fractured alluvium
				$\frac{1}{4}$ -15	
				15-17	
				17-52	
				52-55	

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51° 11'	84° 43'	north shore, Albany River.	Al-28	0- $\frac{1}{2}$ $\frac{1}{2}$ -1 $\frac{1}{2}$ 1 $\frac{1}{2}$ -15	organic material, roots, decomposed leaves horizontally bedded gravels, containing cobbles and boulders light brown silty till with large fraction of gravel, cobbles and boulders; bottom of unit appears to have rudimentary bedding, grades into lower unit
				15-25 25-30 30-50 50-53	well-sorted silt well-sorted medium-fine sand well-sorted medium-fine gravel alluvium
51° 10'	84° 41'	north shore, Albany River.	Al-29	0-1 1-2 2-30 30-60	organic material, roots, decomposed leaves medium gravel, well-sorted brown silty till, sedimentary and volcanic rock fragments rusty red weathered siltstone, horizontal bedding, fresh rock is grey-green

TABLE 23(continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°08'	84°38'	south shore, Albany River.	Al-30	0- $\frac{1}{2}$ $\frac{1}{2}$ -5 5-25 25-45 45-46	organic material, roots, decomposed leaves fine-to-coarse gravel brown silty till red siltstone, horizontal bedding, highly weathered and fractured alluvium
51°08'	84°36'	north shore, Albany River.	Al-31	0-1 1-4 4-11	organic material, roots, decomposed leaves clayey, silty till interbedded lamellae of clay and silt containing rock fragments and sand up to 2 inch diameter. Gravel and sand lenses at bottom of unit
				11-26	clayey silty till. Top of this unit is weathered rusty red
				26-56	medium to coarse gravels; poor horizontal bedding
51°07'	84°32'	north shore Albany forks	Al-32	0- $\frac{1}{2}$ $\frac{1}{2}$ -38 38-40	organic materials, roots, decomposed leaves silty till alluvium

TABLE 23(continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°07'	84°30'	north shore, Albany forks.	Al-33	0-1 1-6 6-35 35-38	organic material, roots, decomposed leaves horizontally bedded sand to gravel clayey, silty till alluvium
51°14'	84°21'	north shore, Albany River.	Al-35	0- $\frac{1}{2}$ $\frac{1}{2}$ -15 15-40	organic material, roots, decomposed leaves brown silty till, grades down into the unit below clayey, silty till
51°14'	84°18'	north shore, Albany River.	Al-36	0- $\frac{1}{2}$ $\frac{1}{2}$ -40	organic material, roots, decomposed leaves clayey silty till, large fraction of sedimentary rock fragments
51°15'	84°16'	north shore of Albany River at Comb Island.	Al-37	0- $\frac{1}{2}$ $\frac{1}{2}$ -25	organic material, roots, decomposed leaves clay and silt, few rock fragments, lenses of marine shells
51°16'	84°12'	north shore, Albany River.	Al-38	25-28 0-1 1-32	alluvium organic material, roots, decomposed leaves, peat creamy brown, well sorted, horizontally bedded silt. Beds approximately two inches thick, some beds rusty red, others grey.
				32-35	alluvium

TABLE 23(continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°17'	84°04'	north shore, Albany River.	Al -39	0- $\frac{1}{2}$ $\frac{1}{2}$ -32	organic material, roots, decomposed leaves, peat clay and silt, small fraction of medium-to-large gravel, marine shells
51°19'	83°55'	north shore, Albany River.	Al -41	32-35 0- $\frac{1}{2}$ $\frac{1}{2}$ -17 17-20	alluvium organic material, roots, decomposed leaves, peat clay and silt with fine-to-medium gravel fraction
51°21'	83°49'	Albany River, Hat Island.	Al -42	0- $\frac{1}{2}$ $\frac{1}{2}$ -26	organic material, roots, decomposed leaves well-sorted clay, minor fine-to-medium gravel fraction, marine shells. Horizontal beds approximately $\frac{3}{4}$ " thick
51°24'	83°45'	north shore, Albany River.	Al -43	26-30 0- $\frac{1}{2}$ $\frac{1}{2}$ -20 20-23	alluvium organic material, roots, decomposed leaves massive clay and silt
51°25'	83°42'	north shore, Albany River.	Al -44	0- $\frac{1}{2}$ $\frac{1}{2}$ -6	alluvium organic material, roots, decomposed leaves light brown silt, horizontal bedding 1 inch to 1.5 inches thick with very small gravel fractions
				6-26	brown clayey, silty till, "greenstone" rock fragments predominate

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°25'	83°38'	north shore, Albany River.	Al -45	0-1 1-11 11-20 20-21	organic material, roots, decomposed leaves clay and silt blue clayey till alluvium
51°25'	83°36'	north shore, Albany River.	Al -46	0-1 1-30	organic material, roots, decomposed leaves clay and silt, abundant marine shells
51°26'	83°34'	north shore, Albany River.	Al -47	0- $\frac{1}{2}$ $\frac{1}{2}$ -14 14-16	organic material, roots, decomposed leaves brown silt, some rock fragments alluvium
51°28'	83°32'	north shore, Albany River.	Al -48	0- $\frac{1}{2}$ $\frac{1}{2}$ -30	organic material, roots, decomposed leaves clay and silt, very few rock fragments
51°29'	83°27'	south shore of Albany River, east end of Cheepay Island.	Al -49	0-1 1-23 23-25	organic material, roots, decomposed leaves, peat clay and silt, marine shells, horizontal bedding, beds approximately 1.5 inches thick alluvium

TABLE 23(continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°29'	83°24'	east bank, mouth of Cheepay River.	Al -50	0- $\frac{1}{4}$ $\frac{1}{4}$ -1 $\frac{1}{4}$ 1 $\frac{1}{4}$ -9 9-25 25-30	organic material, roots, decomposed leaves medium gravel, some marine shells well sorted pale brown silt, massive fine to coarse gravel with marine shells slump
51°31'	83°22'	north shore, Albany River.	Al -51	0- $\frac{1}{2}$ $\frac{1}{2}$ -5 5-15 15-17	organic material, roots, decomposed leaves well sorted massive silt, small gravel lenses medium sand grades down to medium gravel alluvium
51°34'	83°20'	north side, Norran Island.	Al -52	0- $\frac{1}{2}$ $\frac{1}{2}$ -7 7-15	organic material, roots, decomposed leaves medium sand, grade into next unit down section medium gravel
51°36'	83°18'	north shore, Albany River.	Al -53	0- $\frac{1}{4}$ $\frac{1}{4}$ -15 15-28 28-31	organic material, roots, decomposed leaves well sorted, very fine sand grades into unit below medium gravel slump

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°36'	83°15'	south shore, Albany River.	Al-54	0-1 1-21 21-25	organic material, roots, decomposed leaves clay and silt, large coarse gravel fraction slump
51°41'	83°10'	south end, Blackbear Island.	Al-55	0-½ ½-5 5-25	organic material, roots, decomposed leaves well sorted pale brown silt, marine shells slump
51°45'	83°08'	north side, Blackbear Island.	Al-56	0-½ ½-10 10-30	organic material, roots, decomposed leaves well sorted, pale brown silt, marine shells medium gravel mostly covered by slump
51°48'	83°03'	south end of Sand Cherry Island.	Al-57	0-1 1-7 7-12	organic material, roots, decomposed leaves horizontally bedded silt with marine shells well bedded fine sand with fine to medium gravel. Bottom 6 inches iron stained
				12-36 36-39	clayey silty till with many 'greenstone' rock fragments alluvium
51°49'	83°02'	north shore of Albany River.	Al-58	0-½ ½-8 8-15 15-25	organic material, roots, decomposed leaves horizontally bedded silt with marine silt medium to coarse gravel slump

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°53'	82°54'	south bank, Albany River by Wiskakoming Island.	Al -59	0- $\frac{1}{2}$ $\frac{1}{2}$ -15 15-20	organic material, roots, decomposed leaves blue clayey till slump
51°54'	82°51'	west end of Fishing Creek Island.	Al -60	0- $\frac{1}{2}$ $\frac{1}{2}$ -5 5-13 13-27 27-30	organic material, roots, decomposed leaves massive, pale brown silt, marine shells sand and gravel blue clayey till, rock fragments are all sedimentary slump
51°55'	82°49'	north side, Fishing Creek Island.	Al -61	0- $\frac{1}{2}$ $\frac{1}{2}$ -5 5-6 6-20	organic material, roots, decomposed leaves massive, pale brown silt, marine shells gravel blue clayey till
51°56'	82°43'	north shore, Albany River.	Al 62	0- $\frac{1}{2}$ $\frac{1}{2}$ -3 $\frac{1}{2}$ 3 $\frac{1}{2}$ -28 28-30 30-45 45-50	organic material, roots, decomposed leaves well bedded, pale brown silt with marine shells brown clayey till with numerous boulders blue clay and silt, slightly damp blue clayey till (very dense) slump

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°55'	82°38'	west end of island in river.	Al -63	0- $\frac{1}{2}$ $\frac{1}{2}$ -10 10-15 15-33 33-35	organic material, roots, decomposed leaves horizontally bedded pale brown silt, marine shells medium sand, horizontally bedded blue clayey till medium sand interbedded with blue clay. Clay beds approximately 1 inch thick
51°56'	82°34'	south shore, Albany River.	Al -64	35-50 0- $\frac{1}{2}$ $\frac{1}{2}$ -4 4-8 8-36 36-40	brown clayey till organic material, roots, decomposed leaves pale brown silt sand and gravel clayey silty till slump
51°57'	82°32'	island in Albany River.	Al -65	0- $\frac{1}{2}$ $\frac{1}{2}$ -5 5-10 10-25 25-30 30-31 31-45 45-50	organic material, roots, decomposed leaves pale brown silt, horizontal bedding, marine shells medium sand to medium gravel blue clayey till with very few rock fragments, compressed peat interbedded with blue clay horizontally bedded medium gravel dark brown-black till slump

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51° 58'	82° 29'	west end of Byrd Island.	Al-66	0-1 1-5 5-15 15-25 25-28 28-36 36-50	organic material, roots, decomposed leaves massive silt with marine shells medium to coarse gravel blue clay with numerous rock fragments interlaminated blue clay and compressed peat dark brown till slump
52° 00'	82° 24'	south shore, Albany River.	Al-67	0-1 1-5 5-6 6-36	organic material, roots, decomposed leaves massive pale brown silt well sorted fine gravel blue clayey till, very few rock fragments
52° 01'	82° 24'	south shore, Albany River.	Al-68	0- $\frac{1}{2}$ $\frac{1}{2}$ -5 $\frac{5}{2}$ -10 10-27 27-30	organic material, roots, decomposed leaves massive pale brown silt, marine shells medium sand to medium gravel blue clayey till alluvium
52° 03'	82° 22'	north shore, Albany River.	Al-69	0- $\frac{1}{2}$ $\frac{1}{2}$ -5 $\frac{5}{2}$ -8 8-18 18-22	organic material, roots, decomposed leaves massive pale brown silt, marine shells medium to coarse gravel blue clayey till slump

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
52°04'	82°21'	north shore, Albany River.	Al-70	0-½ ½-1 ½ 1 ½-13 13-30 30-45	organic material, roots, decomposed leaves horizontally bedded medium sand to gravel clayey silty till, high percentage of rock fragments dense blue clay with few rock fragments slump and alluvium
52°06'	82°12'	south shore, Albany River, one mile below Biglow Creek.	Al-71	0-½ ½-1 ½ 1 ½-2 2-6 6-40	organic material, roots, decomposed leaves well sorted massive silt medium gravel brown silty till with abundant rock fragments blue clayey till
52°07'	82°05'	south shore, Albany River.	Al-72	0-½ ½-5 5-6 6-30	organic material, roots, decomposed leaves horizontally bedded pale brown silt with marine shells well sorted medium gravel slump
52°08'	82°00'	west end of most westerly island in Albany River mouth.	Al-73	0-½ ½-5 5-13 13-20	organic material, roots, decomposed leaves horizontally bedded pale brown silt and very fine sand with marine shells medium to coarse gravel interbedded with sand blue clayey till

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°28'	87°55'	north shore, Triangle Lake.	Al-80	0- $\frac{1}{2}$ $\frac{1}{2}$ -3 3-5 $\frac{1}{2}$ 5 $\frac{1}{2}$ -44 44-45 $\frac{1}{2}$	organic material, roots, decomposed leaves well-sorted medium sand well-sorted fine sand well-sorted medium sand slump material
51°28'	88°58'	Albany River at Eskakwa Falls.	Al-81	0- $\frac{1}{2}$ $\frac{1}{2}$ -5 5-17 17-28 $\frac{1}{2}$	organic material, roots, decomposed leaves well-sorted, medium sand well-sorted, medium-coarse sand well-sorted, very fine sand
50°01'	90°19'	north shore, Pashkokogan L.	Al-82	0- $\frac{1}{2}$ $\frac{1}{2}$ -25	organic material, roots, decomposed leaves poorly-sorted sand, gravel and cobbles
50°09'	90°16'	north shore,	Al-83	0- $\frac{1}{2}$ $\frac{1}{2}$ -15 15-	organic material, roots, decomposed leaves medium sand to fine gravel bedrock

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50° 25'	84° 22'	in front of abandoned Mamamattawa Trading Post.	Kn-1	0- $\frac{1}{4}$ $\frac{1}{4}$ -10 10-30	organic material, decomposed leaves, roots massive silt with shells, gravel at base of unit blue clay, no rock fragments
50° 31'	84° 30'	1 mile downstream of junction of Kenogami and Ash Rivers.	Kn-2	0- $\frac{1}{2}$ $\frac{1}{2}$ -20 20-25	organic material, roots, decomposed leaves brown clayey silty till slump
50° 38'	84° 28'	2.5 miles upstream of junction of Kenogami and Kingfisher Rivers.	Kn-3	0- $\frac{1}{4}$ $\frac{1}{4}$ -10 10-12 12-20	organic material, roots, decomposed leaves brown silt well-sorted medium gravel slump
50° 42'	84° 26'	3.5 miles downstream of junction of Kenogami and Kingfisher Rivers.	Kn-4	0- $\frac{1}{2}$ $\frac{1}{2}$ -10 10-15 15-20	organic material, roots, decomposed leaves silt grades down into medium sand medium gravel slump

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50°48'	84°28'	1 mile downstream of junction of Kenogami and Wakashi Rivers.	Kn-5	0- $\frac{1}{2}$ $\frac{1}{2}$ -28	organic material, roots, decomposed leaves well sorted horizontal beds of medium, coarse sand, and fine, medium and coarse gravel, abundant small cobbles appear in the coarse gravel bed slump
50°48'	84°29'	3 miles downstream of junction of Kenogami and Wakashi Rivers.	Kn-6	0- $\frac{1}{2}$ $\frac{1}{2}$ -4 $\frac{1}{2}$ 4 $\frac{1}{2}$ -30	organic material, roots, decomposed leaves horizontally bedded gravels blue clay and silt with abundant marine shells
50°49'	84°30'	west shore, Kenogami River.	Kn-7	0- $\frac{1}{4}$ $\frac{1}{2}$ -10 10-20 20-25	organic material, roots, decomposed leaves massive silt blue clay grades down into clay and silt slump
50°50'	84°34'	opposite mouth of Drowning River on Kenogami River.	Kn-8	0- $\frac{1}{2}$ $\frac{1}{2}$ -25	organic material, roots, decomposed leaves clayey silt with marine shells and a few rock fragments

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50°57'	84°35'	½ mile upstream of junction of Kenogami and Little Current Rivers.	Kn-9	0-½ ½-24 24-30	organic material, roots, decomposed leaves clay and silt slump
50°58'	84°35'	½ mile downstream of junction of Kenogami and Little Current Rivers.	Kn-10	0-½ ½-10 10-30	organic material, roots, decomposed leaves clay and silt, no rock fragments clay and silt, abundant "greenstone" and sedimentary rock fragments
50°57'	84°35'	opposite mouth of Little Current R.	Kn-11	0-½ ½-15 15-25	organic material, roots, decomposed leaves pale brown massive silt with marine shells blue-grey silt with "greenstone" rock fragments
50°58'	84°36'	1 mile downstream of junction of Kenogami and Little Current Rivers.	Kn-12	0-½ ½-15 15-25	organic material, roots, decomposed leaves massive silt with marine shells; gravel lense silty till

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°059'	84°37'	west shore of Kenogami River.	Kn-13	0- $\frac{1}{4}$ $\frac{1}{2}$ -3 $\frac{1}{4}$ 3 $\frac{1}{4}$ -5 5-15	organic material, roots, decomposed leaves pale brown silt with marine shells medium fine gravel mixed with silt lamellae of very fine sand and blue clay. Some sand lamellae stained red.
51°40'	84°36'	opposite south end of unnamed island in Kenogami River.	Kn-14	15-26 26-30 0- $\frac{1}{2}$ $\frac{1}{2}$ -5 $\frac{1}{2}$ 5 $\frac{1}{2}$ -10 10-15	blue massive clay and silt slump organic material, roots, decomposed leaves massive pale brown silt medium-fine sand to medium gravel slump
51°02'	84°35'	$\frac{1}{2}$ mile downstream of north end of unnamed island in Kenogami River.	Kn-15	0- $\frac{1}{2}$ $\frac{1}{2}$ -20	organic material, roots, decomposed leaves brown, massive silt
51°02'	84°34'	1 mile downstream of north end of unnamed island in Kenogami River.	Kn-16	0- $\frac{1}{2}$ $\frac{1}{2}$ -10 10-13 13-20	organic material, roots, decomposed leaves brown silt gravel and sand; contains good quantity of water blue clay and silt

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50°06'	84°10'	$\frac{1}{2}$ mile down-stream of Rodgers Road boat slip.	Kb-1	0- $\frac{1}{2}$ $\frac{1}{2}$ -32 32-40	organic material, roots, decomposed leaves clayey silty till, high gravel fraction slump
50°06'	84°10'	east shore, Kabinakagami R.	Kb-2	0- $\frac{1}{2}$ $\frac{1}{2}$ -26 26-30	organic material, roots decomposed leaves clayey silty till; blue colour when fresh slump
50°07'	84°11'	west shore, Kabinakagami R.	Kb-3	0- $\frac{1}{2}$ $\frac{1}{2}$ -15 15-35	organic material, roots, decomposed leaves blue clayey silty till well-sorted medium-fine sand. Cross-bedding dips approximately south-east. Beds up to 5 feet thick
50°07'	84°12'	east shore, Kabinakagami R.	Kb-4	0- $\frac{1}{2}$ $\frac{1}{2}$ -29 29-35	organic material, roots, decomposed leaves clayey silty till slump
50°08'	84°13'	east shore, Kabinakagami R.	Kb-5	0- $\frac{1}{2}$ $\frac{1}{2}$ -18 18-20	organic material, roots, decomposed leaves silty till slump

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50° 09'	84° 14'	east shore, Kabinakagami R.	Kb-6	0- $\frac{1}{2}$ $\frac{1}{2}$ -25 25-30	organic material, roots, decomposed leaves silty till slump
50° 11'	84° 15'	west shore, Kabinakagami R.	Kb-7	0- $\frac{1}{2}$ $\frac{1}{2}$ -3 $\frac{1}{2}$ 3 $\frac{1}{2}$ -10 10-13 13-20 20-25	organic material, roots, decomposed leaves well-sorted medium gravel well-sorted silt well-sorted fine gravel blue silt with small gravel-size rock fragment fraction slump
50° 11'	84° 14'	east shore, Kabinakagami R.	Kb-8	0- $\frac{1}{2}$ $\frac{1}{2}$ -5 $\frac{1}{2}$ 5 $\frac{1}{2}$ -30	organic deposits, roots, decomposed leaves massive pale brown silt slump
50° 12'	84° 14'	east shore, Kabinakagami R.	Kb-9	0- $\frac{1}{2}$ $\frac{1}{2}$ -10 10-30	organic material, roots, decomposed leaves massive silt silty till
50° 12'	84° 14'	west shore, Kabinakagami R.	Kb-10	0- $\frac{1}{2}$ $\frac{1}{2}$ -3 $\frac{1}{2}$ 3 $\frac{1}{2}$ -13 13-30	organic material, roots, decomposed leaves pale brown massive silt, marine shells blue clay, conchoidal fracture slump

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50°16'	84°14'	east shore, Kabinakagami R.	Kb-11	0- $\frac{1}{2}$ $\frac{1}{2}$ -8 8-20	organic material, roots, decomposed leaves massive marine silt, marine shells slump
50°17'	84°15'	east shore, Kabinakagami R.	Kb-12	0- $\frac{1}{2}$ $\frac{1}{2}$ -3 $\frac{1}{2}$ 3 $\frac{1}{2}$ -18 18-30	organic material, roots, decomposed leaves pale brown silt, many marine shells blue clay blue clay till
50°18'	84°14'	east shore, Kabinakagami R.	Kb-13	0- $\frac{1}{2}$ $\frac{1}{2}$ -3 $\frac{1}{2}$ 3 $\frac{1}{2}$ -20	organic material, roots, decomposed leaves silt with marine shells grades into unit below blue clayey silty till
50°22'	84°18'	$\frac{1}{2}$ mile upstream of junction of Squirrel and Kabinakagami Rivers.	Kb-14	0- $\frac{1}{2}$ $\frac{1}{2}$ -7 $\frac{1}{2}$ 7 $\frac{1}{2}$ -25	organic material, roots, decomposed leaves massive silt with marine shells blue clayey silt

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50°01'	85°13'	50 yds. down-stream of Pagwa River R. R. bridge.	Pg-1	0- $\frac{1}{2}$ $\frac{1}{2}$ -26	organic material, roots, decomposed leaves clayey silty till containing many "greenstone" rock fragments. Top ten feet of unit are weathered light brown, remainder is blue-grey
50°01'	85°14'	1 mile down-stream of Pagwa River R. R. bridge.	Pg-2	26-30 0- $\frac{1}{2}$ $\frac{1}{2}$ -31	slump material organic material, roots, decomposed leaves clayey silty till. Top two feet appear more silty than remainder
50°02'	85°13'	2 miles down-stream of Pagwa River R. R. bridge.	Pg-3	31-35 0- $\frac{1}{2}$ $\frac{1}{2}$ -35	slump material organic material, roots, decomposed leaves clayey silty till containing lenses of fine, well sorted sand

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50°02'	85°13'	3 miles downstream of Pagwa River R. R. bridge.	Pg-4	0- $\frac{1}{2}$ $\frac{1}{2}$ -10 10-25 25-40	organic material, roots, decomposed leaves well-sorted fine sand, small-scale festoon cross-bedding clayey silty till; separated from the sand by a damp layer of till and sand two feet wide blue clayey silty till, separated from brown till by a two foot layer of till with more medium gravel size rock fragments than usual
50°03'	85°14'	at junction of Pagwachuan River and Airfield Creek.	Pg-5	0- $\frac{1}{2}$ $\frac{1}{2}$ -3 $\frac{1}{2}$ 3 $\frac{1}{2}$ -20	organic material, roots, decomposed leaves silt, grades down into well-sorted medium gravel clayey silty brown till
50°03'	85°13'	$\frac{1}{2}$ mile below junction of Pagwachuan River and Airfield Creek.	Pg-6	0- $\frac{1}{2}$ $\frac{1}{2}$ -15	organic material, roots, decomposed leaves brown clayey silty till, large volume of cobbles

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50°08'	84°49'	1 mile below junction of Pagwachuan and Savoff Rivers.	Pg-7	0- $\frac{1}{2}$ $\frac{1}{2}$ -7 7-15	organic material, roots, decomposed leaves medium gravel grades down to medium sand silty till, very moist
50°09'	84°47'	west shore, Pagwachuan R.	Pg-8	0- $\frac{1}{2}$ $\frac{1}{2}$ -12 12-15	organic material, roots, decomposed leaves silty till alluvium
50°10'	84°47'	east shore, Pagwachuan R.	Pg-9	0- $\frac{1}{2}$ $\frac{1}{2}$ -20 20-25	organic material, roots, decomposed leaves clayey silty till alluvium
50°10'	84°46'	east shore, Pagwachuan R.	Pg-10	0- $\frac{1}{2}$ $\frac{1}{2}$ -7 7-15	organic material, roots, decomposed leaves very fine sand grades down to coarse gravel slump
50°12'	84°43'	at junction of Pagwachuan and Kenogami Rivers	Pg-11	0- $\frac{1}{2}$ $\frac{1}{2}$ -3 $\frac{1}{2}$ 3 $\frac{1}{2}$ -20 20-40	organic material, roots, decomposed leaves medium sand to fine gravel blue clayey till slump

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50° 13'	84° 42'	east shore, Kenogami River.	Pg-12	0- $\frac{1}{2}$ $\frac{1}{2}$ -3 $\frac{1}{2}$ 3 $\frac{1}{2}$ -30	organic material, roots, decomposed leaves medium sand to fine gravel very highly weathered siltstone, bedding approximately horizontal
50° 14'	84° 41'	south shore, Kenogami River.	Pg-13	0- $\frac{1}{2}$ $\frac{1}{2}$ -32 32-40	organic material, roots, decomposed leaves clayey silty till; rock fragments are medium gravel size slump
50° 15'	84° 38'	south shore, Kenogami River.	Pg-14	0- $\frac{1}{2}$ $\frac{1}{2}$ -20 20-40	organic material, roots, decomposed leaves silty till, rock fragments are fine gravel size horizontally bedded pale green siltstone. Weathers rusty red along fracture lines
50° 18'	84° 32'	north shore, Kenogami River.	Pg-15	0- $\frac{1}{2}$ $\frac{1}{2}$ -60	organic material, roots, decomposed leaves silty till; cobbles of limestone are numerous
50° 22'	84° 27'	north shore, Kenogami River.	Pg-16	0- $\frac{1}{2}$ $\frac{1}{2}$ -10 10-60	organic material, roots, decomposed leaves silty till horizontally bedded, cream coloured siltstone, highly fractured, occasional red beds

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50° 23'	84° 21'	3 miles above Mamamattawa on Kenogami River.	Pg-17	0- $\frac{1}{2}$ $\frac{1}{2}$ -10 10-12 12-22 22-30	organic material, roots, decomposed leaves pale brown, massive silt, marine shells well-sorted medium gravel, water bearing blue clay, contains needle-like organic material slump

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50°59'	83°28'	east shore, Cheepay River.	Ch-1	0-1 1-13 13-15	organic material, roots, decomposed leaves blue clayey silty till with fine to medium gravel size rock fragments alluvium
51°02'	83°29'	Cheepay River.	Ch-3	0- $\frac{1}{2}$ $\frac{1}{2}$ -25	organic material, roots, decomposed leaves blue clayey till, rock fragments are predominately "greenstone"
51°03'	83°32'	Cheepay River.	Ch-4	0- $\frac{1}{2}$ $\frac{1}{2}$ -4 4-10 10-25	organic material, roots, decomposed leaves silty till silt and very fine sand slump
51°04'	83°32'	Cheepay River.	Ch-5	0- $\frac{1}{2}$ $\frac{1}{2}$ -4 4-10 10-15	organic material, roots decomposed leaves pale brown massive silt with marine shells medium fine sand to medium-coarse gravel slump

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°05'	83°32'	Cheepay River.	Ch-7	0-1 1-30	organic material, roots, decomposed leaves blue clayey silty till
51°06'	83°32'	1 mile above junction of Cheepay and Awagakama Rivers.	Ch-8	0- $\frac{1}{2}$ $\frac{1}{2}$ -5 5-30 30-34	organic material, roots, decomposed leaves interbedded silts and gravels, marine shells silty till slump
51°07'	83°32'	2 miles below junction of Cheepay and Awagakama Rivers.	Ch-9	0- $\frac{1}{2}$ $\frac{1}{2}$ -1 $\frac{1}{2}$ 1 $\frac{1}{2}$ -20	organic material, roots, decomposed leaves, peat medium to fine gravel blue silt with lenses of very fine sand, marine shells. Piece of driftwood found two feet below the contact with the gravel
				20-35	slump material
51°10'	83°30'	Cheepay River.	Ch-12	0- $\frac{1}{2}$ $\frac{1}{2}$ -2 2-4 4-14 14-24 24-45	organic material, roots, decomposed leaves massive pale-brown silt medium sand with marine shells blue clay well sorted medium sand silty till

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51° 11'	83° 30'	Cheepay River.	Ch-13	0-½ ½-6 6-36	organic material, roots, decomposed leaves massive silt with marine shells bedded fine to medium sand with lenses of coarse gravel
				36-40	slump material
51° 12'	83° 30'	Cheepay River.	Ch-14	0-½ ½-3 3-30	organic material, roots, decomposed leaves massive silt blue silt and clay

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50°29'	83°0'53"	south shore, Ridge River.	Rg-1	0- $\frac{1}{2}$ $\frac{1}{2}$ -35 35-40	organic material, roots, decomposed leaves clayey silty till slump
50°29'	83°0'54"	Ridge River.	Rg-2	0-1 1-16 16-25 25-30	organic material, roots, decomposed leaves, peat clayey silty till medium sand to medium gravel slump
50°29'	83°0'54"	Ridge River.	Rg-3	0- $\frac{1}{2}$ $\frac{1}{2}$ -15 15-20	organic material, roots, decomposed leaves, peat clayey silty till slump

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50° 29'	83° 55'	Ridge River.	Rg-4	0- $\frac{1}{2}$ $\frac{1}{2}$ -1 $\frac{1}{2}$ 1 $\frac{1}{2}$ -6 6-8 8-28 28-30	organic material, roots, decomposed leaves, peat well-sorted medium gravel well-sorted silt well-sorted medium gravel clayey silty till alluvium
50° 28'	83° 56'	Ridge River.	Rg-5	0- $\frac{1}{2}$ $\frac{1}{2}$ -13 13-15	organic material, roots, decomposed leaves, peat clayey silty till slump
50° 27'	83° 57'	Ridge River.	Rg-6	0- $\frac{1}{2}$ $\frac{1}{2}$ -3 $\frac{1}{2}$ 3 $\frac{1}{2}$ -5 $\frac{1}{2}$ 5 $\frac{1}{2}$ -10 10-22 22-25	organic material, roots, decomposed leaves, peat well-sorted fine sand well-sorted medium-fine gravel horizontally bedded clay and silt; dense brown clayey silty till slump
50° 26'	83° 58'	Ridge River.	Rg-7	0- $\frac{1}{2}$ $\frac{1}{2}$ -10 10-15 15-26 26-30	organic material, roots, decomposed leaves pale brown well-sorted silt well sorted fine sand brown clayey till slump

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50°26'	83°58'	Ridge River.	Rg-8	0- $\frac{1}{2}$ $\frac{1}{2}$ -3 $\frac{1}{2}$ 3 $\frac{1}{2}$ -8 8-24 24-30	organic material, roots, decomposed leaves well sorted, pale brown massive silt well sorted, very fine sand blue clayey till slump
50°26'	83°59'	Ridge River.	Rg-9	0- $\frac{1}{4}$ $\frac{1}{4}$ -1 $\frac{1}{4}$ 1 $\frac{1}{4}$ -20 20-30	organic material, roots, decomposed leaves well-sorted pale brown, massive silt medium-to-coarse sand blue, dense clayey silty till
50°24'	84°04'	Ridge River.	Rg-10	0- $\frac{1}{2}$ $\frac{1}{2}$ -21 21-25	organic material, roots, decomposed leaves brown clayey till slump
50°24'	84°06'	Ridge River.	Rg-11	0- $\frac{1}{2}$ $\frac{1}{2}$ -10 10-25	organic material, roots, decomposed leaves massive pale brown silt; marine shells blue clay and silt; dense
50°24'	84°10'	south shore, Ridge River.	Rg-12	0- $\frac{1}{2}$ $\frac{1}{2}$ -15 15-20	organic material, roots, decomposed leaves clayey till slump, containing marine shells

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50° 25'	84° 11'	north shore, Ridge River.	Rg-13	0- $\frac{1}{2}$ $\frac{1}{2}$ -14 14-15 15-30	organic material, roots, decomposed leaves, peat well sorted very fine sand medium sand to cobbles blue clayey silty till
50° 25'	84° 12'	north shore, Ridge River.	Rg-14	0- $\frac{1}{2}$ $\frac{1}{2}$ -5 5-21 21-25	organic deposits, roots, decomposed leaves massive silt, marine shells clayey silty till slump

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50° 51'	85° 49'	south shore, Little Current River.	Lc-1	0- $\frac{1}{4}$ $\frac{1}{4}$ -21 21-25 slump	organic material, roots, decomposed leaves brown silty till, high percentage of coarse sand and fine gravel
50° 51'	85° 48'	1 mile upstream of the Askawamattawa Creek.	Lc-2	0- $\frac{1}{2}$ $\frac{1}{2}$ -13 13-15 slump	organic material, roots, decomposed leaves brown silty till
50° 54'	85° 41'	north shore, Little Current River.	Lc-3	0- $\frac{1}{2}$ $\frac{1}{2}$ -20 20-25 slump	organic material, roots, decomposed leaves brown silty till

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50° 55'	85° 34'	south shore, Little Current River.	Lc-4	0- $\frac{1}{2}$ $\frac{1}{2}$ -20	organic material, roots, decomposed leaves silty till, minor fraction of coarse gravel-size greenstone rock fragments
50° 56'	85° 29'	1 mile upstream of Komushikoba River.	Lc-5	0- $\frac{1}{2}$ $\frac{1}{2}$ -20	organic material, roots, decomposed leaves silty till
50° 55'	85° 26'	north shore, Little Current River.	Lc-6	0- $\frac{1}{2}$ $\frac{1}{2}$ -30	organic material, roots, decomposed leaves clayey silty till, dense, lenses of very fine sand
50° 54'	85° 22'	north shore, Little Current River.	Lc-7	0- $\frac{1}{2}$ $\frac{1}{2}$ -21 21-25	organic material, roots, decomposed leaves brown silty till slump
50° 54'	85° 20'	south shore, Little Current River.	Lc-8	0- $\frac{1}{2}$ $\frac{1}{2}$ -30 30-35	organic material, roots, decomposed leaves brown silty till slump

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50°53'	85°17'	north shore, Little Current River.	Lc-9	0- $\frac{1}{4}$ $\frac{1}{2}$ -31 31-35	organic material, roots, decomposed leaves brown silty till slump
50°53'	85°16'	north shore, Little Current River.	Lc-10	0- $\frac{1}{2}$ $\frac{1}{2}$ -20 20-30	organic material, roots, decomposed leaves brown silty till horizontally bedded limestone. Beds approximately one inch thick, highly fractured, fossiliferous
50°52'	85°09'	north shore, Little Current River.	Lc-11	0- $\frac{1}{2}$ $\frac{1}{2}$ -32 32-35	organic material, roots, decomposed leaves dark grey clayey silty till, dense; local damp patches slump
50°53'	85°03'	north shore, Little Current River.	Lc-12	0- $\frac{1}{2}$ $\frac{1}{2}$ -5 $\frac{1}{2}$ $\frac{1}{2}$ -6 $\frac{1}{2}$ 6 $\frac{1}{2}$ -45	organic material, roots, decomposed leaves brown silty clayey till damp blue silty till blue silty till
50°54'	84°59'	north shore, Little Current River.	Lc-13	0- $\frac{1}{2}$ $\frac{1}{2}$ -5 $\frac{1}{2}$ $\frac{1}{2}$ -6 $\frac{1}{2}$ 6 $\frac{1}{2}$ -45	organic material, roots, decomposed leaves brown silty clayey till damp blue silty till blue silty till

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50° 56'	84° 53'	north shore, Little Current River.	Lc-15	0- $\frac{1}{4}$ $\frac{1}{4}$ -25 25-50	organic material, roots, decomposed leaves brown silty till grey-green siltstone, highly fractured, weathers red
50° 56'	84° 51'	north shore, Little Current River.	Lc-16	0- $\frac{1}{2}$ $\frac{1}{2}$ -44 44-50	organic material, roots, decomposed leaves brown silty till slump
50° 56'	84° 49'	north shore, Little Current River.	Lc-17	0- $\frac{1}{2}$ $\frac{1}{2}$ -3 $\frac{1}{2}$ 3 $\frac{1}{2}$ -30 30-35 35-40 40-55	organic material, roots, decomposed leaves horizontally bedded fine sand and gravel brown silty till fine-to-medium gravel silty till grey-green siltstone, highly fractured, weathers red
50° 56'	84° 48'	south shore, Little Current River.	Lc-18	0- $\frac{1}{2}$ $\frac{1}{2}$ -35 35-36 36-50	organic material, roots, decomposed leaves brown silty till fine to coarse gravels grey-green siltstone, highly fractured

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50° 56'	84° 47'	south shore, Little Current River.	Lc-19	0- $\frac{1}{2}$ $\frac{1}{2}$ -10 10-13 13-25	organic material, roots, decomposed leaves horizontally bedded sands and gravel well-sorted blue silt brown silty till
50° 56'	84° 45'	south shore, Little Current River.	Lc-20	0- $\frac{1}{2}$ $\frac{1}{2}$ -30 30-35	organic material, roots, decomposed leaves brown silty till; gravel lenses locally in top two feet of the section slump
50° 56'	84° 44'	north shore, Little Current River.	Lc-21	0- $\frac{1}{2}$ $\frac{1}{2}$ -40	organic material, roots, decomposed leaves brown silty till
50° 56'	84° 44'	south shore, Little Current River.	Lc-22	0- $\frac{1}{4}$ $\frac{1}{4}$ -2 $\frac{1}{4}$ 2 $\frac{1}{4}$ -35	organic material, roots, decomposed leaves massive silt brown silty till
50° 56'	84° 44'	north shore, Little Current River.	Lc-23	0- $\frac{1}{4}$ $\frac{1}{4}$ -1 $\frac{1}{4}$ 1 $\frac{1}{4}$ -25 25 -40	organic material, roots, decomposed leaves interlaminated silt and gravel beds silty till horizontally bedded fine-to-coarse gravel

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50°56'	84°43'	south shore, Little Current River.	Lc-24	0- $\frac{1}{2}$ $\frac{1}{2}$ -1 $\frac{1}{2}$ 1 $\frac{1}{2}$ -40	organic material, roots, decomposed leaves silt and gravel beds, interlaminated brown silty till
50°56'	84°42'	south shore, Little Current River.	Lc-25	0- $\frac{1}{2}$ $\frac{1}{2}$ -3 $\frac{1}{2}$	organic material, roots, decomposed leaves pale brown silt, horizontally bedded, beds approximately 1.5 inches thick, some gravel lenses
				3 $\frac{1}{2}$ -40	clayey silty till, containing abundant boulders
50°57'	84°41'	north shore, Little Current River.	Lc-26	0- $\frac{1}{2}$ $\frac{1}{2}$ -5 $\frac{1}{2}$ 5 $\frac{1}{2}$ -30	organic material, roots, decomposed leaves brown silty till containing gravel lenses brown silty till
50°56'	84°41'	south shore, Little Current River.	Lc-27	0- $\frac{1}{2}$ $\frac{1}{2}$ -10 10-25 25-40	organic material, roots, decomposed leaves well-sorted silt with marine shells, small amount of gravel clayey silty till pale green siltstone, highly fractured, very soft

TABLE 23 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ALBANY RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°25'	82°36'	east bank of Stopping River.	St-1	0- $\frac{1}{4}$ $\frac{1}{4}$ -14	organic material, roots, decomposed leaves, peat light brown, massive silt and fine sand, marine shells
				14-15	alluvium
51°55'	82°01'	east bank of Stopping River.	St-2	0- $\frac{1}{2}$ $\frac{1}{2}$ -2 $\frac{1}{2}$ 2 $\frac{1}{2}$ -3 $\frac{1}{2}$ 3 $\frac{1}{2}$ -15	organic material, roots, decomposed leaves light brown, massive silt with marine shells well sorted medium gravel clayey silty till with many limestone cobbles and some granitic gravel-size rock fragments
				15-18	slump

TABLE 24
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 ATTAWAPISKAT RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
52°23'	85°09'	northeast shore of Missisa Lake.	Mi-1	0-0.3 0.3-1.3 1.3-5.0	organic material (muskeg) saturated with water frozen muskeg pale grey sandy clay
51°50'	89°38'	near northeast end of Badesdawa Lake. Otoskwin River.	Ot-1	0-1.0 1.0-1.7 1.7-2.1 2.1-4.1 4.1-9.5	poorly sorted medium brown sand with large pebbles. (Thickness of layer is undetermined.) medium brown, medium grained fair sorted sand poorly sorted or unsorted material which resembles sandy till clay with minor sand sandy to bouldery till of undetermined thickness. Material ranges from fine sand to boulders over 2½ feet in diameter

TABLE 25
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 SEVERN RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
55°47'	88°00'	along the Severn River 40 miles below the junction of the Fawn River.	Se-1	0-10 10-25 25-25.7 25.7- 65.7 67.5	loose medium brown sandy to cobblely till compacted silty to clayey till with multi medium and large pebbles well sorted brown-grey silt and very fine sand dark grey and green-grey semi-consolidated clayey silty till water
53°44'	92°20'	Sachigo Hills	Sa-1	0 0-0.5 0.5-1.0 1.0- >3.0	organic material medium brown very fine, well sorted sand which is bleached grey at the surface coarse to very fine grained poorly sorted medium brown sand very fine well sorted medium brown sand

TABLE 26
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 WINISK RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
55°16'	85°14'	near Town of Winisk.	Wi-1	0-10	pale grey-brown silt and very fine sand is intercalated with thin sandy and pebbly layers, which are sometimes up to 12 inches thick.
				10-16	pale olive green or green-grey silty to clayey-silty till of undetermined thickness
53°51'	87°02'	Winisk River north of Gneiss Rapids.	Wi-2	0-3	pale brown material resembles silty till but has poorly developed layering includes a 2 to 4 inch darker brown layer in the middle of the section. Widely scattered pebbles up to $\frac{1}{2}$ inch in diameter are present.
				3-8	poorly sorted, graded bedded, thinly bedded deposits range from pebbles to fine sand

TABLE 26 (continued)
 DESCRIPTIONS OF MEASURED GEOLOGIC SECTIONS
 WINISK RIVER BASIN

LOCATION			Field No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
53°51'	87°02'	Winisk River north of Gneiss Rapids.	Wi-2 (cont'd)	8-14	till: matrix of till is fine sand but material is unsorted and ranges from well rounded boulders greater than one foot in diameter to very fine sand
				14-19	till: grey-brown compacted till with well rounded cobbles. Some clay is present in the till. The boundary between the upper and lower tills is well defined
53°56'	87°06'	Winisk River 2 miles north of the confluence with the Tabasokwia Channel.	Wi-3	0-0.5 0.5-3.5	organic material well sorted very fine grained sands in the uppermost part of the section; the lower foot is well layered but poorly sorted
				3.5-6.0	well sorted fine grained cross bedded sands. The upper most one to two inches is weathered
				6-13	prominently layered, graded bedded poorly sorted sands

TABLE 27
OBSERVATION WELL LOGS
ALBANY RIVER BASIN

LOCATION			Well No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50°21'	87°05'	junction of Anaconda Road and Kowkash Road, southeast of Hanover Lake, District of Thunder Bay, in lacustrine plain adjacent to the lower flanks of the Agutua mor- aine.	43-05- 001 (1)	0-3 3-52 52-79 79-97 97-103 103-112 112-128 128	Sand; Medium brown well sorted fine sand. Clay: Pale brown clay with scattered laminae of silt. Below 47 feet clay is hard packed, and semi- consolidated. Silt: Pale grey well sorted silt and very fine sand. Silt and Clay: Intercalated silt and clay. Silt and Clay: Compacted silt layers are intercalated with clay layers. Silt and Clay: Intercalated silt and clay with some silt layers compacted. Sandy Till: Pale grey sandy till with matrix of very fine sand. Bedrock: "Greenstone" forms end of hole. Static Level: 49.12 feet.

(1) designates a specific well at a multiple-well location.

TABLE 27 (continued)
OBSERVATION WELL LOGS
ALBANY RIVER BASIN

LOCATION			Well No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50°21'	87°05'	junction of Anaconda Road and Kowkash Road, southeast of Hanover Lake, District of Thunder Bay, in lacustrine plain adjacent to the lower flanks of the Agutua moraine.	43-05- 001 (2)	0-8 8-13 13-17 17-25 25-67 67	Sand: Fine grained, medium brown, well sorted sand. Clay: Sand: Similar to 0-8 feet but with thin layers of pebbles intercalated in the sand. Sand and Silt: Very fine sand and silt with inter- calated laminae of clay below 20 feet. Sand is concentrated in the upper portion of the increment. Clay: Pale grey plastic clay with thin beds of silt. Bedrock: Hole ends at the "greenstone" clay interface Static Level: 21.37 feet.

(2) designates a specific well at a multiple-well location.

TABLE 27 (continued)
OBSERVATION WELL LOGS
ALBANY RIVER BASIN

LOCATION			Well No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50°20'	87°05'	junction of Anaconda Road and Kowkash Road, southeast of Hanover Lake, District of Thunder Bay, in lacustrine plain adjacent to the lower flanks of the Agutua moraine.	43-05-001 (3)	0-3 3-15 15-40 40-44 44-109 109-117 117-126 126	Sand: Well sorted pale grey to medium brown to pale brown cross-bedded very fine grained and fine grained sand. Clay: Pale brown clay. Silt: Clayey-Silt/Silty-Clay: Pale grey to pale green-grey silty clay/clayey silt. Clay: Pale grey plastic clay. Till: Till contains granules and pebbles, but the matrix is pale grey clayey sand/sandy clay. Till: Grey clayey sand forms the matrix of the till, but there is a preponderance of "greenstone" pebbles in it. Bedrock Static Level: 31.36 feet.

(3) designates a specific well at a multiple-well location.

TABLE 28
OBSERVATION WELL LOGS
ALBANY RIVER BASIN

LOCATION			Well No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50° 25'	87° 08'	Anaconda Road, north of Hanover Lake, District of Thunder Bay, in the north-eastern flank of the Agutua moraine.	43-05-002 (1)	0-16 16-24 24-30 30-30.5	Sand: Pale brown well sorted medium grained sand. Sand: Very coarse grained medium brown sand with granules and pebbles. Sand and Sandy Till: Upper part is predominantly sand but lower part is sandy till? Bedrock: Hole terminates 6 inches in the "greenstone" bedrock. Static Level: Dry well.

(1) designates a specific well at a multiple-well location.

TABLE 28 (continued)
OBSERVATION WELL LOGS
ALBANY RIVER BASIN

LOCATION			Well No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50°25'	87°08'	Anaconda Road north of Hanover Lake, District of Thunder Bay, in the north-eastern flank of the Agutua moraine.	43-05-002 (2)	0-3 3-30 30-41 41.41.6	<p>Till and Sand: The uppermost 6 inches is grey-brown sandy till. Below it is medium to coarse grained, poorly sorted sand, which grades downward into a zone with pebbles, cobbles and boulders.</p> <p>Sand: Pale grey, well sorted fine grained sand. Due to the difference in colour, grain size, and degree of sorting the contact between this layer and the overlying one is very conspicuous.</p> <p>Sand: Coarse grained and very coarse grained poorly sorted sand which is exceedingly loose such that the drill rods can penetrate it by their own weight without being rotated.</p> <p>Bedrock: Hole ends at 8 inches inside the "greenstone" bedrock.</p> <p>Static Level: 35 feet.</p>

(2) designates a specific well at a multiple-well location.

TABLE 29 (continued)
OBSERVATION WELL LOGS
ALBANY RIVER BASIN

LOCATION			Well No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50°01'	84°10'	18 miles north of Calstock, District of Cochrane, in clayey till and sand and gravel plain of the Hudson Bay Lowlands.	43-05-003 (1) (cont'd)	118-170 170-199 199	Sand and Gravel: Intercalated sand and pebble layers 2-3 feet thick. Pebbles are well rounded and are predominantly composed of limestone with minor jasper. Sand is very coarse grained. Gravel: Poorly sorted, well rounded fine to coarse pebble gravel with minor amounts of very coarse sand. Bedrock: Limestone. Static Level: 84.57 feet.

TABLE 29 (continued)
OBSERVATION WELL LOGS
ALBANY RIVER BASIN

LOCATION			Well No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
50°01'	84°10'	18 miles north of Calstock, District of Cochrane, in Esker in the Hudson Bay Lowlands,	43-05 003 (2)	0-15 15-25 25-33 33-120 120	Clayey Till: Pale brown compacted clayey till with pebbles of limestone, mafic, and granitoid rocks, and fragments of corals. Sand: Very coarse grained poorly sorted medium brown sand. Gravel: A very large pebble gravel. Sand and Gravel: Very coarse grained poorly sorted sand grades downward into sandy gravel. Gravel is a very coarse pebble to cobble gravel with very coarse sand. End of hole. Static Level: 80 feet.

(2) designates a specific well at a multiple-well location.

TABLE 30
OBSERVATION WELL LOGS
ALBANY RIVER BASIN

LOCATION			Well No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51° 17'	83° 58'	west of Hat Island, Albany River, in a marine plain of the Hudson Bay Lowlands.	43-05-004	0-2 2- 23.6 23.6- 64.5 64.5- 66.7 66.7-70 85- 95 95-110 110-120 120-125 125-135 135-145 145-150	Organic Sandy clay Clayey till, silty, dense. Basaltic and granitic boulders. Basaltic and limestone boulders. Basaltic boulders. Milky micrite, conchoidally fractured. Light grey highly fractured micrite. No recovery. Milky, highly fractured micrite. Milky, fossiliferous, pelittiferous micrite. Dark grey pelittiferous, conchoidally fractured micrite. Static Level: -57.7 feet. (flowing well)

TABLE 31
OBSERVATION WELL LOGS
ALBANY RIVER BASIN

LOCATION			Well No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°45'	86°11'	Buffaloskin River, Albany River, in a marine plain of the Hudson Bay Lowlands.	43-05-006	0-6 6-6.3 6.3-8 8-27 27-41.5 41.5-46.5 46.5-90 90-91 91-93 93-97 97-97.5 101-104 104-107 107-118	Fine, silty sand. Coarse sand. Fine sand. Clayey till. Sand, gravel and little clay. Clayey till. Sandy clayey till. Dolomite boulder. Siltstone boulder. Boulder. Siltstone fragments. Abrasive siltstone. Lost circulation at 101 feet. No recovery. Green-grey, semi-consolidated siltstone. Static Level: 17 feet.

TABLE 32
OBSERVATION WELL LOGS
ALBANY RIVER BASIN

LOCATION			Well No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°43'	85°32'	Wabimeig, Albany River, in a marine plain of the Hudson Bay Lowlands.	43-05-005 (1)	0-5 5-46.5 46.8- 50.3 54.1 54.1- 63.7 63.7- 69.4 69.4- 74.2 74.2- 79.2	Organic matter. Greenish grey, silty clayey till. Boulder. Milky, silty, porous limestone. Light brown, calcareous siltstone. Light brown calcareous mudstone. Light brown calcareous siltstone. Light brown, calcareous, porous siltstone. Static Level: 29.9 feet.

(1) designates a specific well at a multiple-well location.

TABLE 32 (continued)
OBSERVATION WELL LOGS
ALBANY RIVER BASIN

LOCATION			Well No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51° 43'	85° 32'	Wabimeig, Albany River, in a marine plain of the Hudson Bay Lowlands.	43-05-005 (2)	0-1.5 1.5-20 20-35 35-55 55-62.6 62.6-65 65-70 70-75 75-100 100- 107.6 107.6- 122.5 122.5- 127.5 127.5- 130 130-133	Organic matter. Sandy till. Sand and gravel Silty till. Silty clay. Light grey limestone. Light grey dolomite. Milky dolomite. Milky, silty, porous micrite. Milky, porous, silty dolomite. Light brown grey calcareous siltstone. Milky to light brownish-grey, porous, silty micrite. Milky to light brownish-grey porous, laminated micrite. Milky limestone and calcareous siltstone.

(2) designates a specific well at a multiple-well location.

TABLE 32 (continued)
OBSERVATION WELL LOGS
ALBANY RIVER BASIN

LOCATION			Well No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°43'	83°32'	Wabineig, Albany River, in a marine plain of the Hudson Bay Lowlands.	43-05-005 (2) (contd)	133-136 136- 138.8 138.8- 145.6 145.6- 162.1 162.1- 167.1 167.1- 182.2 182.2- 187.2	Light grey limey siltstone. No recovery. Milky, silty, porous micrite. Light grey calcareous siltstone. Milky micrite with 3 inch lens of fine sand. Light grey calcareous siltstone. Light grey to white-grey mudstone/siltstone. Static Level: 4.8 feet.

TABLE 33
OBSERVATION WELL LOGS
ATTAWAPISKAT RIVER BASIN

LOCATION			Well No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°51'	89°36'	Otoskwin River at Badesdawa Lake, in fluvial deposits forming old leveés.	44-05- 001	0-0.6 0.6-25 25-40 40-44 44-50 50-55 55-60 60-64 64-75 75-79 79-87	Organic material. Silt with a trace of clay. Clay varies from hard at 15 feet to very stiff at 20-25 feet. Clay and silt with a few pebbles and a ½ inch layer of medium and coarse sand at 30 feet. Silt with little clay. Silty grey clay with ½ inch silt layer. Silt with some very fine sand and with some 1/16 inch medium sand layers. Silt with a little clay. Grey clay, very stiff to hard. Silty very fine sand with some ½ to 1 inch silt and clay layers. Sandy silt. Fine and very fine sand with some silt.

TABLE 33 (continued)
OBSERVATION WELL LOGS
ATTAWAPISKAT RIVER BASIN

LOCATION			Well No.	Depth Below Surface (feet)	DESCRIPTION
Latitude North	Longitude West	Field Location			
51°51'	89°36'	Otoskwin River at Badesdawa Lake, in fluvial deposits forming old levees.	44-05-001	87-103.1	<p>Bedrock:</p> <p>87-87.5: Medium grained grey granodioritic gneiss.</p> <p>87.5-88.1: Fine grained grey amphibolite with layering dipping at 70°.</p> <p>88.1-89.1: White intrusive pegmatite parallel to layering.</p> <p>89.1-103.1: Fine grained grey, layered amphibolite. Layering dipping at 70°. Scattered layers of quartz feldspar to ½ inch contain assimilated amphibolite.</p> <p>103.1 End of Hole. Static Level: 41.70 feet.</p>



Living under canvas at Sachigo Lake during a period of hydrometric measurements and geologic investigations.



Echo-sounding on Missisa Lake by use of an electric transducer and recorder.

TABLE 34
OBSERVATION WELL DATA
ATTAWAPISKAT RIVER BASIN

Observation Well No: 44-05-001
Observer: OWBC
Location: 51°51'N. 89°36'W.
Elevation: 1130.2', (land surface) based on Inland Waters Branch bench mark.
Type: Open end pipe 2 3/8" inside diameter
Aquifer or geologic material: Fine and very fine sand with some silt.
Depth: 86.5 feet, 6 inches above bedrock.
Recording method: Automatic recorder Leopold & Stevens A-35.
Records commenced: August 23, 1967
Measuring point: Top of casing 3 feet above land surface.

Average daily water levels from land surface.

1967

Day	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1									42.22	43.77	44.95	45.54
2									42.24	43.80	44.99	45.54
3									42.30	43.93	45.00	45.54
4									42.32	43.95	45.03	45.54
5									42.33	44.05	45.04	45.54
6									42.45	44.06	45.07	45.54
7									42.54	44.13	45.09	45.55
8									42.56	44.17	45.09	45.58
9									42.65	44.19	45.10	45.60
10									42.67	44.25	45.13	45.60
11									42.73	44.27	45.13	45.63
12									42.76	44.30	45.13	45.63
13									42.81	44.30	45.17	45.67
14									42.82	44.42	45.19	45.67
15									42.92	44.43	45.21	45.70
16									42.99	44.50	45.23	45.70
17									43.02	44.53	45.26	45.73
18									43.05	44.55	45.26	45.73
19									43.12	44.60	45.28	45.73
20									43.15	44.63	45.29	45.75
21									43.21	44.69	45.30	45.76
22									43.24	44.70	45.35	45.77
23								41.70	43.30	44.70	45.35	45.79
24								41.75	43.31	44.70	45.36	45.83
25								41.80	43.37	44.73	45.36	45.83
26								41.81	43.43	44.78	45.38	45.83
27								42.93	43.50	44.81	45.38	45.83
28								42.00	43.60	44.85	45.43	45.84
29								42.01	43.62	44.87	45.45	45.85
30								42.10	43.71	44.87	45.48	45.85
31								42.16		44.95		45.86

1968

Day	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1	45.86	46.33				41.11	40.08	40.38	40.39	41.06		
2	45.87	46.33				41.11	40.09	40.39	40.38	41.06		
3	45.95	46.33				41.10	40.09	40.49	40.36	41.08		
4	45.99	46.34				41.10	40.10	40.49	40.36	41.09		
5	46.03	46.34				41.10	40.10	40.50	40.33	41.10		
6	46.07	46.35				41.09	40.10	40.50	40.33	41.10		
7	46.10	46.36				41.09	40.10	40.56	40.33	41.10		
8	46.10	46.36				41.09	40.10	40.56	40.33	41.28		
9	46.11	46.37				41.08	40.10	40.56	40.33	41.28		
10	46.13	46.38				41.08	40.10	40.56	40.33	41.28		
11	46.13	46.38				41.07	40.10	40.56	40.33	41.28		
12	46.13	46.38				41.05	40.10	40.76	40.33	41.30		
13	46.13	46.38				40.86	40.10	40.76	40.33	41.33		
14	46.16	46.38				40.70	40.09	40.76	40.33	41.33		
15	46.16	46.39				40.68	40.06	40.78	40.34	41.33		
16	46.16					40.50	40.01	40.78	40.36	41.33		
17	46.17					40.30	40.01	40.78	40.36	41.33		
18	46.18					40.20	40.00	40.79	40.37	41.33		
19	46.20					40.10	40.00	40.79	40.40	41.30		
20	46.20					40.02	40.00	40.79	40.54	40.95		
21	46.22					40.00	40.00	40.79	40.55	40.64		
22	46.23					40.00	40.00	40.76	40.58	40.36		
23	46.25					40.00	40.02	40.75	40.58	40.15		
24	46.25					41.55	40.00	40.05	40.66	40.59	40.00	
25	46.26					41.55	40.00	40.05	40.66	40.84	39.90	
26	46.26					41.35	40.00	40.05	40.66	40.84	39.80	
27	46.27					41.29	40.00	40.05	40.64	40.85	39.64	
28	46.28					41.20	40.00	40.05	40.63	40.95	39.61	
29	46.28					41.12	40.00	40.05	40.49	40.95	39.48	
30	46.33					41.12	40.00	40.05	40.43	40.96		
31	46.33					41.11	40.05	40.38	40.39			

Records after October 29, 1968, not available at time of publication.

CHEMICAL ANALYSES OF WATER SAMPLES

CHEMICAL ANALYSES ALBANY RIVER BASIN

ALBANY RIVER BASIN

Source	Sample No.	Longitude West	Date	Temperature (°C)	pH	Constituents in parts per million														Alkalinity as ppm CaCO ₃		Hardness as ppm CaCO ₃		Total Dissolved Solids (ppm)	Specific Conductance (micro-mhos at 25°C)	Color (Pt-Co)	Turbidity (NTU)
						Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Bromine (Br)	Nitrate (NO ₃)	Phosphate (PO ₄)	Fluoride (F)	Total	Calcium	Total						
ALBANY RIVER	51°39'	85°35'	23-8-66	7.5											trace				64		68		60		28		
*ALBANY RIVER	51°39'	85°35'	23-8-66	7.9			30	1	0.7	0.4			3	2					43		52				40	1.7	
*ALBANY RIVER	51°29'	88°59'	28-8-66	7.6		0.83	14	3	0.0	0.4			4	2					42		46				25	2.1	
ALBANY RIVER	51°29'	88°59'	28-8-66	7.4											trace				55		51		81		35		
ALBANY RIVER	51°30'	89°03'	3-8-67	8.2	3.2	0.05	14	0	1	1	54.9		0	1				0	45	40	40	75.5	84	28	1.4		
*ALBANY RIVER	51°30'	89°03'	3-8-67	8.7	14	0.25	13						1	1					43		44		50			2.9	
ALBANY RIVER	51°22'	89°26'	9-8-67	8.2	8.8	0.4	18	0	1	1	61		0	2				0	50	45	45	77.1		35	12		
*ALBANY RIVER	51°23'	89°40'	24-8-67	8.1	12	0.15	14						1	1					49		50		60			7.3	
ALBANY RIVER	51°12'	89°58'	1-7-68	8.2	4.5	0.22							3	4				0	55	41	45		118	65	22		
*ALBANY RIVER	51°12'	89°58'	1-7-68	7.8		1.2								1				54		66			80		2.9		
ALBANY RIVER	51°24'	89°03'	21-7-68	8.3	3.5	0.08							3	1				0	45	37	42		97	52	35		
*ALBANY RIVER	51°24'	89°03'	21-7-68	7.3	0.5	2.4	18	0.3	0.8	0.3			5	1	0.04			32		58			99				
ALBANY RIVER	51°09'	84°26'	23-7-68	7.7	3.9	0.04							4	1				0	50	40	50		102	55	30		
ALBANY RIVER	51°37'	82°32'	25-7-68	8.3	6.2	0.2							7	1				0	40	34	45		94	>70	35		
ALBANY RIVER	51°40'	83°04'	25-7-68	8.1	3.7	0.08							7	2				0	53	40	53			>70	45		
ALBANY RIVER	52°03'	82°22'	26-7-68	8.0	3.9	0.07							7	2				0	45	45	55		110	>70	28		
ALBANY RIVER	51°34'	85°14'	24-7-68	8.4	3.7	0.04							4	1				0	50	40	50		11	11	11		
ALBANY RIVER	51°42'	84°00'	26-8-68	7.0	3.4	0.21							13	2				0	45	40	55		80	40	30		
ALBANY RIVER	52°14'	81°35'	34-9-68	7.6	4.7	0.2							8	6				0	55	40	62		103	>70	20		
ARMOTT LAKE	49°36'	84°36'	12-4-68	8.4																			240		<5		
*ARMOTT LAKE	49°36'	84°36'	12-4-68	7.8		0.20								1				127		136			<5		1.8		
ATWOOD RIVER	51°25'	88°30'	30-8-66	7.4		trace												75		68		103	25				
*ATWOOD RIVER	51°25'	88°30'	30-8-66	7.3		0.05	8	10	0.4	0.5			3	1				73		60			30	1.1			
ATWOOD RIVER	51°16'	88°12'	29-8-67	8.0	12.0	0.15	18						1	1				57		58		66			2.6		
BALKAN CREEK	50°12'	86°43'	7-8-68	7.4	4.7	0.08							4	3				0	45	70	85		180	40	16		
BALKAN CREEK	50°12'	86°43'	11-9-68	8.1	5.4	0.2							8	4				0	141	70	85		174	35	12		
BALKAN CREEK	50°12'	86°43'	14-9-68	8.2	5.8	0.08							11	4				0	105	85	103		200	25	8		
BUTEMAY LAKE	50°04'	84°59'	16-8-68	7.4	6.2	0.17							4	2				0	205	150	176		420	5	15		
CAT RIVER	51°11'	91°36'	16-5-68	6.5		0.1								7.6					27		34						
CREEPER RIVER	51°20'	83°30'	4-8-68	7.3	3.2	0.22							8	4				0	45	50	57		122	>70	38		
CONSTANCE LAKE	49°48'	84°09'	11-6-68	8.3	3.2	0.08							13	37				0	122	75	105		222	10	20		
*CONSTANCE LAKE	49°48'	84°09'	11-6-68	7.4		0.1							1														
FLINT RIVER	50°03'	85°30'	30-5-68	7.2		0.1								19.5				75		120		134					

* analyses and pH performed in the Ontario Ministry of Resources Canada Laboratory

** pH = January 1968 to 1971

CHEMICAL ANALYSES OF WATER SAMPLES

CHEMICAL ANALYSES, ALBANY RIVER BASIN

ALBANY RIVER BASIN

Source	Latitude North	Longitude West	Date	Temperature (°C)	pH	Constituents in parts per million													Alkalinity as ppm CaCO ₃		Hardness as ppm CaCO ₃		Total Dissolved Solids (ppm)	Specific Conductance at 25°C (µmhos/cm)	Colour (Pt-Co)	Turbidity (NTU)	
						Silica (SiO ₂)	Iron (Fe)	Copper (Cu)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Sulphate (SO ₄)	Chloride (Cl)	Bromine (Br)	Nitrate (NO ₃)	Phosphate (PO ₄)	Fluoride (F)	Total	Calcium (Ca)	Total						
FLINT RIVER	50°03'	85°30'	30-6-67	7.5		0.01									15.2			96		86		144	25				
FOUR LAKES	49°44'	84°25'	11-6-68	8.4	5.6	0.07								11	6			0	110	95	110		240	20	10		
GOVERNMENT LAKE	49°12'	86°53'	13-6-68																				145	40	8		
*GOVERNMENT LAKE	49°12'	86°53'	13-6-68	7.7		0.13								1				75		80		60	0.6				
IRISH LAKE	49°42'	86°05'	7-6-68	7.5	8.3	0.23								10	3			0	45	21	29		39	>70	55		
JAAS LAKE	51°10'	82°58'	8-9-68	7.1	4.3	0.2								19	1			0	32	22	45		55	>70	70		
KARIMAGAGANI RIVER	49°44'	86°06'	7-6-68	8.2	2.8	0.25								13	4			0	72	58	70		155	30	18		
KARIMAGAGANI RIVER	50°22'	86°38'	26-8-68	8.1	5.4	0.25								13	2			0	45	63	50		130	>70	40		
KAWASHKAGANA RIVER	50°26'	87°09'	5-7-67	8.2	2.15	0.83	38	0.9				91.5		1	1			0	75	0	75	129.5	160	28	10		
KAWASHKAGANA RIVER	50°26'	87°09'	25-5-68	7.5		0.1								7.6					62		120						
KAWASHKAGANA RIVER	50°26'	87°09'	17-5-68	8.5	7.3	0.3								15.2					62		68		125				
KAWASHKAGANA RIVER	50°26'	87°09'	17-5-68	4.5	7.3	0.1								15.2					62		68		125				
KENOGAMI RIVER	50°04'	85°49'	38-6-67	7.8	2.4	0.62	38	0				91.5	0	1				0	75	0	75	128.6	160	25	3		
KENOGAMI RIVER	50°04'	85°49'	12-8-67	7.5		0.1								15.2					89		86		101	45			
KENOGAMI RIVER	50°04'	85°49'	23-5-68	54	7.8	0.3								15.2					62		51		127				
KENOGAMI RIVER	50°58'	86°31'	4-8-68	7.4	1.08	0.7	22	2	0.8	0.3			6	0	0.02				59		44		117				
KENOGAMI RIVER	50°58'	86°31'	29-8-68	7.7	3.7	0.25								9	3			0	40	47	75		97	>70	52		
KENOGAMI RIVER	50°04'	85°49'	21-5-68	54	7.8	0.1								15.2					62		51		127				
KLUGE LAKE	49°08'	85°52'	16-6-68																				120				
MINIWIJKA LAKE	51°35'	88°30'	9-8-67	7.7	9.6	0.04	20	1.2	1	1	34.9	0	1					0	45	50	55	83.6		38	16		
MINIWIJKA LAKE	51°35'	88°30'	6-8-67	8.0	4.3	0.62	16	1.2	1	1	34.9	0	2					0	45	40	45	78		35	8		
*MINIWIJKA LAKE	51°35'	88°30'	6-8-67	8.3	14	0.25	16							1	1				52		54	70			2.3		
MOBBLEY LAKE	49°34'	90°35'	19-7-67	7.7	13.7	0.25	4	1.2	0.5	0.5	18.3	0	1					0	15	10	15	32	40	45	16		
MOBBLEY LAKE	49°34'	90°35'	23-5-68	6.3		0.3								7.6					21		34						
MUSKAWIK RIVER	51°52'	85°05'	21-7-68	7.2	0.6	0.9	17	2	0.7	0.4			5	1	0.02				48		52		94				
MUSKAWIK RIVER	51°52'	85°05'	21-7-68	8.2	2.9	0.24								3	2			0	50	35	45		100	>70	38		
NACAGANISTIS LAKE	49°28'	86°40'	13-6-68	8.3																			200	45			
*NACAGANISTIS LAKE	49°28'	86°40'	13-6-68	7.7		0.1													109		110		440		0.7		
NARSAM LAKE	49°40'	86°16'	15-6-68																196		200			20	1.8		
*NARSAM LAKE	49°40'	86°16'	15-6-68	7.7		0.19													0	56	49	60		115	20	8	
OGOKI RIVER	50°33'	86°09'	20-8-67	7.2	10.5	0.02								0	2				0	56	49	60					
*OGOKI RIVER	50°33'	86°09'	20-8-67	7.9	19	0.33	17							3	1				59		60	82					
OPICHUAN RIVER	51°18'	89°46'	22-8-67	8.0		0								0	0.3				0	60	47	60		106	20	1	
PACHMACHAN RIVER	50°11'	85°34'	22-8-68	7.3	4.7	0.06								0	1				0	160	60	80		220	60	35	
PACHMACHAN RIVER	50°12'	86°04'	22-8-68	7.6	5.4	0.25								11	3				0	90	45	82		163	>70	27	

* analyses performed in the Ontario Water Resources Commission Laboratory

** T.D. = Jackson Turbidity Unit

CHEMICAL ANALYSES OF WATER SAMPLES

CHEMICAL ANALYSES - ALBANY RIVER BASIN

ALBANY RIVER BASIN

Source	Latitude North	Longitude West	Site	Temperature (°C)	pH	Constituents in parts per million													Alkalinity as ppm CaCO ₃		Hardness as ppm CaCO ₃		Total Dissolved Solids (ppm)	Specific Conductance (microhm-cm)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
						Silica (SiO ₂)	Iron (Fe)	Cadmium (Cd)	Magnesium (Mg)	Selenium (Se)	Potassium (K)	Sulfate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Boron (B)	Nitrite (NO ₂)	Phosphate (PO ₄)	Fluoride (F)	Total	Calcium	Total					
PASKEWOGAN LAKE	51°01'	90°16'	16-7-87	7.7	8.4	0.03	8	0.7	0.5	0.5	30.6	0	2				0	30	20	25	40.5	54	22	2		
PASKEWOGAN RIVER	51°03'	90°12'	23-5-88	7.0		0.1								7.6				47		51						
FERRY LAKE	50°40'	86°33'	27-8-86	7.9										trace				103		103		180	21			
*FERRY LAKE	50°40'	86°35'	27-8-86	7.7		0.18	22	6	0.8	0.5		2	1					69		82			45	1.8		
PITOPERO RIVER	49°46'	84°46'	16-6-88	7.9														49		64		138	70	0.5		
*PITOPERO RIVER	49°46'	84°46'	16-6-88	7.9		0.26								1				0	29	64		28	70	30		
FLEDER LAKE	50°53'	83°42'	31-8-86	7.4	3.2	0.02								2	2			0	30	42			70	30		
QUENISTON LAKE	50°24'	86°44'	14-9-86	7.5											28			82		103		142	70	30		
*QUENISTON LAKE	50°24'	86°44'	14-9-86	7.4		0.1	21	4	0.5	0.5				1	2			82		70			70	30		
RIDGE RIVER	50°28'	83°34'	6-9-88	8.2	2.4	0.3								9	4			0	50	60		60	70	30		
SAINT JOSEPH LAKE	49°47'	84°02'	6-8-88	8.2	3.4	0.07								12	6			0	60	60		135	55	42		
SEEGAHAGA LAKE	50°02'	86°28'	17-7-87	7.6	8.4	0.05	4	0.5	0.5	0.5	24.4	0	2					0	20	12		35.8	65	35		
SHULAK RIVER	49°45'	84°24'	10-6-88	8.3	5.6	0.02								12	5			0	97	75		80	10	15		
SHUNK RIVER	49°45'	84°29'	10-6-88	8.2	7.5	0.1								12	7			0	115	110		115	70	30		
SUPERN LAKE	50°30'	87°50'	7-85	7.7										trace					94		103		150	30		
*SUPERN LAKE	50°30'	87°50'	9-86	7.8		0.2	26	5	0.8	0.5				2	2				99		86			30		
THOFTLEY LAKE	51°42'	88°53'	31-8-86	7.9											trace				137		120		140	5		
*THOFTLEY LAKE	51°42'	88°53'	31-8-86	8.2		0.07	32	10	1.1	1.0				3	1				118		124			30		
UPPER TWIN LAKE	50°08'	86°37'	-86	7.4											trace				103		86			34		
UPPER TWIN LAKE	50°08'	86°37'	-86	7.4		0.12	25	6	0.9	0.4				3	26				78		88			35		
VALENTINE RIVER	49°44'	84°03'	6-8-88	7.5	2.5	0.15								13	2.5			0	70	52		75	104	25		
WASHNIEG LAKE	51°29'	88°35'	30-8-86	7.3											trace				38		38			149		
*WASHNIEG LAKE	51°29'	88°35'	30-8-86	7.5		0.9	10	1	0.7	0.3				6	1				28		28			149		
WISLEMAN LAKE	51°32'	91°38'	10-7-87	7.1	0	0.1	0.8	0.7	0.5	0.5	24.5	1	2					0	20	22	25	38.0	45	30		
ARTESIAN SPRING	49°46'	85°23'	16-6-86																							
*ARTESIAN SPRING	49°46'	85°23'	16-6-86	7.4		0.68									50				369		382					
ARTESIAN SPRING	49°46'	84°32'	17-6-86																							
*ARTESIAN SPRING	49°46'	84°32'	17-6-86	7.7		0.60									2				284		94					
ARTESIAN SPRING	51°05'	81°32'	29-9-88	7.4	4.3	0.1								13	2			0	245	170	230					
CREEK - NO NAME	51°24'	81°35'	29-9-88	8.0	4.7	0.03								10	4			0	65	52	60					
DOMESTIC WELL	49°45'	84°32'	8-6-86	7.8	8.6	0.24								16	2			0	330	210	310					
LAKE - NO NAME	51°20'	89°03'	3-8-87	6.8	9.43	0.03	2	0			9.76	0	1					0	8	5	5	83				
LAKE - NO NAME	51°42'	88°53'	31-8-86	7.9											trace				205		171					
*LAKE - NO NAME	51°42'	88°53'	31-8-86	8.0		0.3	46	12	1.4	1.7				28	1				161		166					
*BAT ISLAND SITE	51°37'	83°58'	23-6-88	7.6		1.3									20				330		290					

* Estimated a polylog performed in the Georgia Water Resources Center Laboratory (11-11-07) at 25°C, Turbidity Unit.

CHEMICAL ANALYSES - ALBANY RIVER BASIN

ALBANY RIVER BASIN

Source	Latitude N/S	Longitude E/W	Date	Temperature (°C)	pH	Constituents in parts per million													Alkalinity as eqm. CaCO ₃		Hardness as ppm CaCO ₃		Total Dissolved Solids (ppm)	Specific Conductance (microhm/cm @ 25 °C)	Salinity	Density
						Silica (SiO ₂)	Iron (Fe)	Cadmium (Cd)	Nickel (Ni)	Copper (Cu)	Lead (Pb)	Barium (Ba)	Sulfate (SO ₄)	Chloride (Cl)	Bromine (Br)	Nitrate (NO ₃)	Phosphate (PO ₄)	Phosphate as P	Total	Calcium	Total					
HAT ISLAND SITE FEDERAL GOVERNMENT WELL	31°12'	83°58'	30-6-68		8.3		0.09							3	2				0	3-5	0.5	195		<40	34	1.0
*HAT ISLAND SITE FEDERAL GOVERNMENT WELL	31°12'	83°58'	30-6-68		7.8		4.4								3					321	208			30	>30	
*HAT ISLAND SITE FEDERAL GOVERNMENT WELL	31°12'	83°58'	1-7-68		7.5		1.25								20					342	294			15	5	
HAT ISLAND SITE FEDERAL GOVERNMENT WELL	31°12'	83°58'	1-7-68		7.9		0.67							3	17				0	320	205	280		630	25	1.0
*HAT ISLAND SITE FEDERAL GOVERNMENT WELL	31°12'	83°58'	1-7-68		7.8		1.20								1					54	66			80	2.9	
*HAT ISLAND SITE FEDERAL GOVERNMENT WELL	31°12'	83°58'	2-7-68		7.8		0.5								51					50	66			330	0.8	
CHAND RIVER SITE FEDERAL GOVERNMENT WELL	31°18'	84°35'	20-7-68		7.6	7.5	0.03							92	40				0	3-5	100	940		850	4.5	14
WARRIEWEE SITE FEDERAL GOVERNMENT WELL	31°43'	85°32'	21-7-68		8.1	3.2	0.45							11	3				2	3-5	150	353		80	20	1.3
WARRIEWEE SITE FEDERAL GOVERNMENT WELL	31°43'	85°32'	21-7-68		7.1	3.7	0.2							14	9				0	40	40	53		74	45	28
WARRIEWEE SITE FEDERAL GOVERNMENT WELL	31°43'	85°32'	23-7-68		7.7	4.9	0.33							13	4				0	200	355	145		200	35	1.4

⁴² J. H. *et al.*, *contaminant*: Toxicology, 1991.

CHEMICAL ANALYSES - ATTAWAPISKAT RIVER BASIN

Source	Latitude (North)	Longitude (West)	Date	Temperature (°C)	pH	Constituents in parts per million														Alkalinity as ppm CaCO ₃		Hardness as ppm CaCO ₃		Total Dissolved Solids (ppm)	Specific Conductance (microhm/cm at 25°C)	Color (Platinum- cobalt units)	Turbidity (NTU)
						Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Boron (B)	Nitrate (NO ₃)	Phosphate (PO ₄)	Fluoride as ppm	Total	Calcium	Total						
BADGEMMA LAKE	51°39'	99°57'	15-8-64		7.4														73		90			55			
*BADGEMMA LAKE	51°39'	99°57'	13-8-68		8.0		0.7	17	3	0.3	0.4		4	1					49		34				70	1.1	
DODIE RIVER	51°37'	90°32'	5-7-67		7.5		0.2							7.6					36		34			34	45		
LEGAMON CREEK	51°51'	89°41'	6-7-67		7.8		0.12							15.2					81		68			128	25		
MISSISSA LAKE	51°18'	85°12'	26-8-63		7.4		0.1							33.2					68		68			110			
MISSISSA LAKE	51°18'	85°12'	26-8-63		7.3		0.3							33.2					41		34			57			

TABLE 37

CHEMICAL ANALYSES OF WATER SAMPLES

CHEMICAL ANALYSES - EKWAN RIVER BASIN

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EKWAN RIVER BASIN

Source	Latitude North	Longitude West	Date	Temperature (°C)	pH	Constituents in parts per million													Alkalinity as ppm CaCO ₃		Hardness as ppm CaCO ₃		Total Dissolved Solids (ppm)	Specific Conductance (microhm/cm at 25°C)	Color (Pt-Co unit)	Turbidity (JTU)
						Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Bromine (Br)	Nitrate (NO ₃)	Phosphate (PO ₄)	Phosphorus (P)	Total	Calcium	Total					
EKWAN RIVER	33°25'	84°25'	12-8-66		7.8									0					96		86		144	140		
*EKWAN RIVER	33°25'	84°25'	12-8-66		7.3		0.63							9					65		70			130	1.1	

CHEMICAL ANALYSES OF WATER SAMPLES

CHEMICAL ANALYSES - MOOSE RIVER BASIN

MOOSE RIVER BASIN

Source	Latitude North	Longitude West	Date	Temperature (°C)	pH	Constituents in parts per million													Alkalinity as ppm CaCO ₃		Hardness as ppm CaCO ₃		Total Dissolved Solids (ppm)	Specific Conductance (microhm/cm at 25°C)	Color (pcu)	Turbidity (JTU 1000)
						Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Bromine (Br)	Nitrate (NO ₃)	Phosphate (PO ₄)	Phenolphthalein	Total	Calcium	Total					
MISSISSAUGI RIVER	50°16'	03°53'	7-9-66		7.9		0.1							trace				96		103		140				
MISSISSAUGI RIVER	50°28'	02°15'	-66		7.3									trace				87		103		140				
*MISSISSAUGI RIVER	50°28'	02°15'	-66		7.5		0.3	23	6	1.3	0.4		2	2				90		82		100		2.5		

¹ - color in units of platinum-cobalt in 2.54 cm. of water; ² - color in units of turbidity in 100 ml. of water.

CHEMICAL ANALYSES OF WATER SAMPLES

CHEMICAL ANALYSES SEVERN RIVER BASIN

SEVERN RIVER BASIN

Source	Latitude (N)	Longitude (W)	Date	Temperature (C)	pH	Constituents in parts per million														Alkalinity as ppm CaCO ₃		Hardness as ppm CaCO ₃		Total Dissolved Solids (ppm)	Specific Conductance (microhm/cm at 25°C)	Color (Pt-Co)	Turbidity (NTU)
																				Total	Calcium	Total	Calcium				
						SiO ₂ (%O ₂)	Fe (%)	Ca (%)	Mg (%)	Na (%)	K (%)	HCO ₃ (%)	SO ₄ (%)	Cl (%)	Br (%)	Mn (%)	P (%)	As (%)	Total								
BEAVER RIVER	55°56'	87°57'	11-8-66		7.7																						
*BEAVER RIVER	55°56'	87°57'	11-8-66		7.8		0.54	35	6	10	6.2		4	13					113		112			212	52		
BLACKBEAR RIVER	54°25'	90°15'	3-8-66		7.8								trace						73		68			108	16		33
BIG TROUT LAKE	53°45'	90°00'	11-7-67			0.08							15.2						62		68			108	3		
DEER LAKE	52°36'	94°05'	15-8-66		7.2								trace						21		25			34	38		
*DEER LAKE	52°36'	94°05'	15-8-66		7.7		0.3						1						17		16			25	0.8		
PAW RIVER	53°47'	90°32'	13-7-67		7.4		0.68						15.2						43		51			73	5		
PAW RIVER	53°47'	90°32'	25-8-67		7.6		0.13						15.2						54		68			85			
PLANKAN RIVER	52°49'	93°23'	26-5-68	60	7.2		0.2						7.6						43		68			76			
PLANKAN RIVER	52°49'	93°23'	26-8-67		6.2																			90			
MAKODP RIVER	53°45'	92°46'	9-8-66		7.4								0						36		51			71	57		
*MAKODP RIVER	53°45'	92°46'	9-8-66		7.7		0.36						1						41		40			65	2.1		
HINWAKAKAH RIVER	53°40'	90°07'	26-8-67			0.12							15.2						41		51			33			
HINWAKAKAH RIVER	53°40'	90°07'	25-8-67		7.6		0.12												34		68			93			
NORRIS RIVER	52°00'	91°03'	24-7-67				0.2							7.6					41		51			25			
SACHIGO RIVER	53°42'	92°13'	-66		7.8																			127	35		
*SACHIGO RIVER	54°05'	92°08'	-66		8.2		0.6	23	4	2	0.5		3	2					73		74			39	7.9		
SACHIGO RIVER	53°42'	92°13'	28-7-67		7.5		0.14						7.58						68		68			105	35		
SACHIGO RIVER	53°42'	92°13'	19-7-67		7.3		0.08						7.58						61		51			96			
SACHIGO RIVER	54°05'	92°08'	26-7-67		6.8		0.08						7.58						68		68			105			
SACHIGO RIVER	53°42'	92°13'	19-8-67			0.10							15.5						75		88						
SACHIGO RIVER	54°05'	92°08'	10-8-67		6.2																			125			
SACHIGO RIVER	54°05'	92°08'	27-5-68	56	7.2		0.1							7.6					41		68			70			
SACHIGO RIVER	54°05'	92°13'	-68		7.2		0.1							7.6					41		68						
SACHIGO RIVER	53°42'	90°12'	-69		7.8		0.1							7.6					46		103			115			
SANDY LAKE	53°00'	93°00'	1-8-66		7.0								trace						55		61			72	20		
*SANDY LAKE	53°00'	93°00'	1-8-66		7.0								1						40		40			80	2.1		
SANDY LAKE	53°00'	93°00'	19-8-67			0.2							15.2						62		51						
SANDY LAKE	53°00'	93°00'	19-8-67			0.10							15.2						54		51						
SANDY LAKE	53°50'	89°45'	25-7-66		7.2								0						55		51			81	11		
*SANDY LAKE	53°50'	89°45'	25-7-66		7.8		0.4						1						47		40			10	2.0		
SCHAUB RIVER	53°33'	91°03'	24-8-67		7.2		0.14						15.2						48		51						
SEVERN RIVER	55°05'	88°59'	-66		7.6																			88	58		
*SEVERN RIVER	55°05'	88°59'	-66		8.2		0.8	14	4	1	0.6		2	1					48		50			60	9.5		

* - analyses performed in the Ontario Water Resources Commission Laboratory

** - T.U. - Turbidity Unit

TABLE 39 (continued)

CHEMICAL ANALYSES OF WATER SAMPLES

CHEMICAL ANALYSES - SEVERN RIVER BASIN

SEVERN RIVER BASIN

Source	Latitude North	Longitude West	Date	Temperature (°C)	pH	Constituents in parts per million														Alkalinity as ppm CaCO ₃		Hardness as ppm CaCO ₃		Total Dissolved Solids (ppm)	Specific Conductance (Microhm @ 25°C)	Colour (Hazen units)	Turbidity (NTU)
						Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Sulphate (SO ₄)	Chloride (Cl)	Bromine (Br)	Iodine (IO ₃)	Phosphate (PO ₄)	Freezing Point (°C)	Total	Calcium	Total						
SEVERN RIVER	55°23'	86°19'	16-7-67		7.2																				128		
SEVERN RIVER	55°23'	86°19'	16-7-67		7.8		0.18							15.2						75		68		130			
*WINDIGO LAKE	52°35'	91°32'	14-7-66		8.0		0.25							1					66		50		85	55	0.7		

TABLE 40

CHEMICAL ANALYSES OF WATER SAMPLES

CHEMICAL ANALYSES - WINISK RIVER BASIN

101

WINISK RIVER BASIN

Source	Latitude North	Longitude West	Date	Temperature (°C)	pH	Constituents in parts per million														Alkalinity as ppm CaCO ₃		Hardness as ppm CaCO ₃		Total Dissolved Solids (ppm)	Specific Conductance (microsiemens at 25°C)	Color (Hazen units)	Turbidity (NTU)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
						Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Boron (B)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Phosphate (PO ₄)	Thiosulfate	Total	Calcium	Total																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
ASHWIC RIVER	53°25'	89°15'	8-8-66																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												

* Laboratory analysis performed by the Ontario Water Resources Commission Laboratory.
 41, 75, 81 = Jackson Turbidity Unit



NOTE:

CONTOUR INTERVAL 2 FEET
 ALL SOUNDINGS IN FEET
 A. TARGETS
 DATUM: BEACH MARK - 100.00'
 RELATIVE WATER SURFACE ELEVATION: 92.35' - AUG. 21, 1955

ONTARIO WATER RESOURCES COMMISSION
 NORTHERN ONTARIO
 WATER RESOURCES STUDY
 WABIMEIG LAKE
 - BATHYMETRIC CONTOURS -

DATE: NOV. 1955 SCALE: 1" = 2000' DRAWING NO. 2000-2



KEY MAP

NOTE:

CONTOUR INTERVAL - 10 FEET
 ALL SOUNDINGS IN FEET
 A... TARGETS
 DATUM - BENCH MARK - 100.00'
 RELATIVE WATER SURFACE ELEVATION: 93.58' - AUG 31, 1966

ONTARIO WATER RESOURCES COMMISSION

NORTHERN ONTARIO
 WATER RESOURCES STUDY

TROUTFLY LAKE
 - BATHYMETRIC CONTOURS -

DATE: NOV 1968 | SCALE: | DRAWING NO.
 BY: H.D. | 2903-1



NOTE:
 CONTOUR INTERVAL: 3 FEET
 ALL SOUNDINGS IN FEET
 6 TARGET
 A INSTRUMENT STATION
 DATUM: BENCH MARK - 100.00' - SPIKE IN FACE OF SPRUCE
 RELATIVE WATER SURFACE ELEVATION: 98.40' - JUNE 27, 1967



KEY MAP

ONTARIO WATER RESOURCES COMMISSION
 NORTHERN ONTARIO
 WATER RESOURCES STUDY

MISSISA LAKE
 - BATHYMETRIC CONTOURS -

DATE: NOV 1967	SCALE: 1" = 60,000'	DRAWING NO. 2904-2
BY: J D S	APPR. 1" = 60,000'	





NOTE:
CONTOUR INTERVAL: 2 FEET
ALL SOUNDINGS IN FEET
A.....TARGETS

ONTARIO WATER RESOURCES COMMISSION
NORTHERN ONTARIO
WATER RESOURCES STUDY

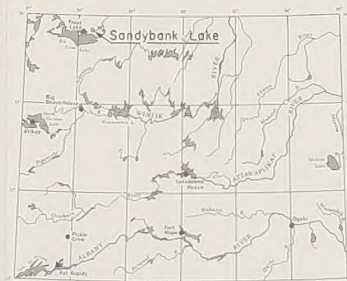
SANDYBANK LAKE
- BATHYMETRIC CONTOURS -

DATE: JAN. 1967

BY: J.D.S.

SCALE:
1:20,000

DRAWING NO.
2901-1



KEY MAP

SCALE 1 INCH = 75 MILES



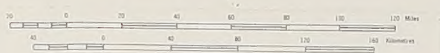
ONTARIO WATER RESOURCES COMMISSION
DIVISION OF WATER RESOURCES

WATER RESOURCES SURVEY
NORTHERN ONTARIO

MAP 2006-3

**HYDROMETRIC STATIONS AND INVESTIGATED SITES
1966-1968**

Scale 1:2,027,520 or 1 Inch to 32 Miles



Base map supplied by Lands & Survey Branch, Dept. of Lands & Forests

LEGEND

- Streamflow gauging site investigated — serial reconnaissance only
- Streamflow gauging site investigated — not gauged
- Water quality, vegetation, and geologic investigation made
- Open water streamflow gauging station, recording gauge
- Streamflow gauging station, recording gauge
- Lake gauge
- Meteorological station
- Precipitation station, recording gauge
- Seasonal rainfall station, OWRC recording gauge
- Snow course
- Ground water observation station, recording
- Ground water observation station, recording
- Lake echo-sounded — D.W.R.C.
- Lake echo-sounded — Dept. of Lands and Forests
- Abandoned station

